

# Six Year Follow Up of Forty Five Pregnant Opiate Addicts

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## Abstract

Forty five pregnant addicts had attended the National Drug Treatment Centre between 1984-1986. At that time they received intensive counselling, low dose Methadone maintenance and both ante natal and post natal care. Our aim was to follow these women six years later focusing on their drug use and outcome of their children. The women were followed up by chart review, individual interviews and liaison with the social and probation services. Results indicate that a high proportion of the women abused chaotically (50%). There is a worrying high incidence of HIV positive patients (53.4%) and a mortality figure of 15.5% (7). However only 13 women (28.6%) have had further children and 22 women (49%) are currently using some form of contraception. Only 23 women (51.1%) have had further contact with probation services. Five children (11.3 %) are under formal care order and 4 children have become HIV positive in their own right. In conclusion, while these women have benefited in certain areas e.g. family planning, contact with probation services, in other areas they have remained chaotic e.g. continued drug abuse or HIV risk taking behaviour. Thus the authors believe that future programmes should concentrate more directly on detoxification and rehabilitation after pregnancy. We also believe that because of the chaotic nature of these women some review of an "at risk" register for the children should be carried out.

## Introduction

Since the early 1980's opiate addiction in Dublin has been recognised as a serious problem<sup>(1)</sup>. Due to the fact that a significant number attending for treatment were females of child bearing age (25%), the emergence of maternal drug addiction as a problem in Ireland was recognised as early as 1981<sup>(2)</sup>. These women are an important group given the medical and obstetrical complications associated with the abuse of opiates during pregnancy<sup>(3)</sup>.

As a response to the growing problem of maternal addiction in the U.K. a number of liaison services were developed within obstetric departments in London hospitals<sup>(4,5)</sup>. A recent report focuses on the establishment of a liaison service for pregnant opiate dependant women as part of a community drug team<sup>(6)</sup>.

In Ireland a service has been in operation for these women as far back as 1984, thus we find ourselves in a unique position to evaluate the long term benefit of this type of programme.

The original study by O'Connor et al focused on the two year period 1984 - 1986<sup>(7)</sup>. Over that time 45 pregnant opiate addicts attended the National Drug Treatment Centre. These women received low dose Methadone maintenance (20mg) and weekly group therapy with a psychiatrist and social worker. The women were assigned to a key worker and attended fortnightly ante-natal clinics also held in the Centre. After childbirth the women were given advice regarding family planning and encouraged to address their opiate addiction.

At that time 21 (45%) of the women had a positive response to the programme in that they attended regularly, did not abuse other drugs (as detected by supervised urinalysis), discontinued criminal lifestyles and had improved awareness of their children's needs.

The aim of the present study was to follow these women up six years after the original study. It appeared that this was a particularly vulnerable and chaotic group thus we were interested in determining whether the intensive treatment they had received resulted in any long lasting benefit. Of special interest, in view of the serious Irish problem with HIV and AIDS, was to discover whether these women became more responsible in their drug use and the rate of perinatal viral transmission.

## Method

After analysis of the results of the previous study each of the women were reviewed using the following methods:

1. Chart review of all 45 patients.
2. Individual interview with all patients in contact with drug treatment services.
3. Interview with Key Workers.
4. Contact with Social Welfare Services, Maternity Hospitals and Probation Services.

Using this information we then concentrated on a number of different areas including :

1. Subsequent pattern of drug abuse and attendance for treatment.
2. Physical health including HIV status.
3. Outcome of children (in care, HIV status).
4. Current or any form of contraception and subsequent obstetrical history.
5. Forensic history.
6. Deaths in target population.

## Results

The mean age of the mothers in 1992 was 29.3 years. At the time of follow up only 7 (15%) patients could not be

TABLE I  
RESULTS

Attendance at the Drug Treatment Centre - since 1986		
n=45		
	No.	%
Continued Attendance to Present Day (maintenance)	5	11.1
No Further Attendance.	2	4.5
One Further Attendance.	6	13.3
Two Further Attendances.	6 (1)	13.3
Three Further Attendances.	1 (1)	2.2
> Four Further Attendances.	25 (5)	55.6
	45 (7)	100 (15.5)

( ) = R.I.P.

contacted. However five of these had been in contact with our services at some stage over the past six years. This is an indication of the fact that the Irish opiate problem is concentrated in Dublin and there is little permanent, movement to the U.K.

All but two of the patients had been in contact with our own service over the last six years (Table I). In fact over 50% of patients had attended the Centre on four or more occasions which would indicate that these women have abused drugs in a chaotic manner over the six years.

Currently 10 (22%) of the patients are on a Methadone maintenance programme at this centre, and 18 (40%) are either attending another service for treatment or abusing chaotically. Only 3 patients became completely drug free over the six year period (Table II).

Regarding the physical status of these women and their HIV status in particular we see that a disturbingly large number are HIV positive (Table III). Twenty four (53.4%) are HIV positive as compared with fifteen (33.3%) in 1986. This is not wholly accounted for by women who were not tested in 1986 being subsequently tested and in fact a number have seroconverted over the years, two as recently as 1991, having been negative in 1986.

Another worrying fact is that 14 out of the 18 HIV positive women still alive are not attending a medical service on a regular basis.

Other medical problems show more encouraging Hg-

TABLE II  
CURRENT STATUS  
N = 45

	No.	%
Currently Attending The Drug Treatment Centre.	10	22.2
Currently Attending G.P./Other Agency	9	20.0
Currently Using Chaotically.	9	20.0
Drug Free.	3	6.7
Unsure of Whereabouts	7	15.6
R.I.P.	7	15.6

TABLE III  
HIV STATUS

	Pre 1986		Post 1986 to June 1992	
	No.	%	No.	%
HIV +ve	15	33.3	24	53.4
HIV -ve	18	40.0	15	33.3
No Test	12	26.7	6	13.3
	45	100%	45	100%

TABLE IV  
CURRENT FORM OF CONTRACEPTION OR AT TIME OF DEATH  
n=45

	No.	%
Depo Provera	13	28.9
I.U.C.D.	4	9.0
Pill	2	4.5
Condoms	2	4.5
Tubal Ligation	1	2.2
No Contraception	13	28.9
Unsure	10	22.3
	45	100%

ures. Since 1986 only 3 women (6.6%) have had hepatitis B, as compared to 20 women (45%) pre 1986. Also there has been a very low incidence of sexually transmitted diseases since 1986 with only 2 women (4.5%) requiring treatment.

Advice given on the programme regarding family planning appears to have been successful given that 22 women (49%) are using some form of contraception (Table IV). Also seven women have attended gynaecology clinics for colposcopy.

Information obtained from probation services shows a marked drop in the number of women involved in criminal activity. Prior to 1986, 44 women (97.8%) had a forensic

TABLE V  
CHILDREN

Up to 1986	–	105	children born to 45 women.
Since 1986	–	17	children born to 13 women.
Since 1986 n=45			
		No.	%
Women with Further Children		13 (6)	28.9
Women with No Further Children.		25	55.5
Uncertain.		7	15.6
Miscarriage.		5 (4)	11.1
Termination.		3	6.7

() = HIV + Mothers

TABLE VI  
WHEREABOUTS OF CHILDREN  
n = 44 (one child miscarriaged)

	No.	%
Mother Looking After Child	19	43.3
Child in Care of Family Member	13	29.5 (6 Mothers R.I.P.)
Care Order.	5	11.3 (1 Mother R.I.P.)
Unsure.	7	15.9

history but since 1986 only 23 women (51.1%) have any further dealings with the justice system.

The number of children born since 1986 also shows a marked reduction (Table V). Prior to 1986 105 children had been born to 45 mothers, since 1986 only 17 children have been born to 13 mothers. In all, 25 women (55.5%) that we definitely know of have had no further children.

Focusing our attention on the children born in the original study period we see that 19 (43.3%) children have remained with their mother. Of the remaining children that we know of only 5 (11.3%) have been placed under a formal care order (Table VI).

Of the 15 children who had been born to HIV positive mothers pre 1986, 4 (26.6%) became HIV positive in their own right and 2 of these are currently on AZT.

Finally a mention is made of the high mortality in this group. Seven 15.9% women have died since 1986, four of these have died of AIDS related deaths, usually due to *Pneumocystis Carnii* Pneumonia (P.C.P.). The other three deaths were caused by drug overdoses, two accidental and one deliberate.

## Discussion

Other studies on an Irish population have found that narcotic addiction presented a wide range of physical and social hurdles to both the mother and baby<sup>(8)</sup>. The previous study by O'Connor et al highlighted the unstable nature of this group of women and as such an intensive treatment programme was established<sup>(7)</sup>.

Methadone maintenance was provided for two main reasons. Firstly in an effort to reduce the intravenous opiate misuse during pregnancy. Detoxification is contraindicated in the first trimester because of the risk of spontaneous abortion and in the third trimester because of the risk of premature labour. Secondly from the point of view of the fetus if the mother is on a low dose of controlled opiates during pregnancy then the risk of withdrawals in the immediate post natal period is substantially reduced<sup>(9)</sup>. More recent evidence has suggested that detoxification during pregnancy may in fact be a feasible option<sup>(10)</sup>.

Our results indicate that in certain areas these women remain chaotic. If we take attendance at the National Drug Treatment Centre as an indication of continued involvement with illicit drugs all but 2 women (4.5%) re-attended or continued to attend. In fact 25 women (55.6%) attended four or more times, showing a high degree of chronicity.

Examining their current pattern of drug use we see that only 3 (6.7%) became drug free and to our knowledge 28 (62.2%) are currently using drugs in some form. Given that 7 women (15.5%) are now dead, their drug taking is a very serious ongoing problem.

Examining sero conversion as an indicator of patients indulging in "at risk behaviour" the number of patients so doing since 1986 (20%) is a worrying one. Overall the figure of 24 patients being HIV positive out of 39 tested (61.5%) shows again the instability of this group and their poor compliance with advice and treatment. It is interesting to compare these figures with those from a similar group of pregnant addicts in the U.K. Out of forty five pregnant women attending a community drug team/ liaison service only seven reported being tested for HIV and these negative (6). Of our own patients the fact that 14 of the 18 HIV positive patients still alive do not attend regularly at any medical clinic does not augur well for the future.

The low incidence of Hepatitis B since 1986 indicates that the Hepatitis epidemic in Dublin did peak in the early 1980's<sup>(11)</sup> and the continued low incidence of S.T.D. would imply that these women have remained monogamous and are not involved in prostitution. Other studies have indicated incidences of S.T.D. at 20% in drug addicted mothers<sup>(12)</sup>. The HIV and Hepatitis B were considered separately from the figures for S.T.D.'s because of the extra risk factor involved of sharing contaminated needles in this population.

In some areas the patients have benefited. Twenty two women out of thirty five (%) are using some form of contraception. This is reflected in the fact that only 13 women (28.9%) have had further children. The worrying aspect is that six of these women were HIV positive and as can be seen from the figures for children born to HIV positive mothers pre 1986 approximately one quarter went on to develop the virus in their own right. Transmission rates of between 13 - 40 % have been reported with more recent European studies tending towards the lower figure<sup>(13)</sup>.

In Ireland it appears that opiate dependent women are determined to keep their children<sup>(14)</sup> and in our study 20 mothers (45.5%) that we know of are still looking after their children. However in a sizable number of cases where the mother is no longer caring for the child, it is in care of a family member, 12 (27.3%). In only five cases is the child under a formal care order. This is markedly different from the U.K. where in one study almost half the cases had been placed under some form of statutory supervision and in another where 90% of the babies were

placed on the Child Protection Register<sup>(15)</sup>. Perhaps in Ireland some review of an “at risk” register should be carried out as courts do seem unwilling to place formal care orders on children.

It was gratifying to note the marked reduction in involvement in criminal activities. The drop from 44 patients (97.8%) pre 1986 to 23 patients (51.1%) reflects either that group intervention was beneficial or else a shift in the legal system from prosecution towards helping this group by referral for treatment.

The final figures of 7 deaths (15.5%), 6 in people who were HIV positive, although not entirely unexpected is however an indication of the instability of this particular population. As time goes on this figure will rise and the authors are aware of a further 2 patients who are currently very seriously ill.

Our study highlights the fact that this group of patients is a very chaotic and unstable group, requiring major input from the medical and psychiatric services. They have continued to abuse drugs and to indulge in at risk behaviour regarding the HIV virus. This is worrying from the patients point of view and that of their children.

On the positive side treatment during pregnancy seemed to result in a more responsible attitude towards further children. The large number of patients using contraception should be taken as a considerable achievement. Also a change in lifestyle is apparent from the fact that many fewer patients were involved in criminal activity than before 1986.

Thus the programme appeared to be of benefit to the patients in both improving responsibility regarding contraception and decreasing criminal activity. In the absence of a control group however other explanations remain to be tested. For example with age some patients do mature out of illicit drug misuse and criminal activity. Also there may be a possible therapeutic effect of having children and need to care for them. The continued abuse of drugs and their risk taking behaviour indicates a need for an extra emphasis in this area.

The authors believe that future treatment programmes should concentrate more directly on detoxification and rehabilitation after pregnancy while not ignoring the important areas of individual lifestyle and social circumstances.

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