

Drugs and Delinquency A Ten Year Follow-up of Drug Clinic Patients

ALISTAIR M. GORDON

Summary: The addiction and conviction status of 60 male patients who presented to a London drug clinic in 1970 was re-examined 10 years later. Eleven of the patients had died. Three-quarters of the survivors had been abstinent for five years and one quarter were still addicted in this time. Ninety-seven per cent had received a court conviction by 1981 and 83 per cent were convicted during follow-up. Neither hospital treatment, receipt of a clinic prescription nor imprisonment was associated with eventual abstinence. Poor outcome, in combined terms of continued addiction and re-conviction, related to early parental loss, poor academic achievement, conviction before drug use, longer imprisonment and a high conviction rate. Criminality emerges as the predominant and continuing expression of deviancy in these drug clinic patients.

An association between drug dependency and criminality is no longer disputed. The initial optimism for British drug policy (Hill, 1970) included an expectation that addicts could avoid involvement in crime to maintain a drug habit and that legitimate prescribing would prevent the growth of a black-market supply. Although British studies of convicted populations (James, 1969; d'Orban, 1970; 1973; 1974; Cockett, 1971; Noble, 1970; 1972) indicated extensive drug abuse, the criminal involvement of British drug clinic populations was less observed. Two surveys of London drug clinic patients (Gordon, 1973; 1978a; Wiepert *et al*, 1979) have indicated that delinquency is an important precursor of addiction in British clinic populations and a dominant characteristic in the subsequent careers of clinic attenders—a situation not unique to Britain but repeated in studies from many countries (Bell and Champion, 1979) and increasingly reported as an integral aspect of drug addiction.

Drug addiction is not a disorder with a prognosis for swift recovery, but British surveys (Thorley *et al*, 1977; Stimson *et al*, 1978) indicate that most addicts survive their addiction in the early stages and many appear to abandon, or mature out of, their dependency. Criminal behaviour is generally more frequent in adolescence or young adulthood and commonly decreases with maturation. The present study continues the observation of a group of male drug addicts, 10 years after their arrival at a London drug clinic (Gordon, 1973). The study examines their subsequent

addiction and conviction status, their pattern of offence behaviour, the interaction between their drug abuse and criminality, and the effect of medical treatment and/or penal containment on eventual outcome.

Subjects and Methods

The subjects of the study were 60 male patients who commenced illicit drug use before 21 years and presented consecutively to a London drug clinic in 1970. Data related to their earlier history were presented in the original study (Gordon, 1973). Their subsequent criminal and addiction careers were described at four year follow-up (Gordon, 1978a). The present 10 year follow-up study (January 1971–January 1981) was compiled from the following sources:— drug clinic records, the Register of Deaths, coroners' reports, the Drugs Branch of the Home Office, Home Office criminal records, general practitioners and voluntary agencies concerned with drug abuse.

Outcome was examined for both the total 10 years of follow-up and the last five years of follow-up. Variables studied included age of first drug use, age of first conviction, age at clinical arrival, age at follow-up, social class, family size, childhood antisocial traits and neurosis, parental loss, parental psychiatric and criminal history, sibling psychiatric and criminal history, educational attainment, pattern of drug use, pattern of offence behaviour, offence outcome, psychiatric ill-

ness and treatment. Data related to significant associations are detailed in the results.

Results

Status at 10 year follow-up

The addiction and conviction status of patients at the end of follow-up (January 1981) was as follows. Eleven patients had died. In the 10 year period, 8 patients were neither convicted nor known to have used drugs, while 50 patients (83 per cent) received a court conviction and 40 patients (66 per cent) had some know drug use. In the last 5 years of the follow-up period (January 1976–January 1981), 12 patients were neither convicted nor known as drug users, eight patients continued to be both convicted and addicted, 17 patients (28 per cent) were convicted but free from known drug abuse and four patients were known drug users but unconvicted. The 49 survivors in the last five years included 20 patients with no convictions or drug use, 12 patients with known drug use and 25 patients with a court conviction.

Mortality

All 11 deaths were directly associated with drug abuse. Ten patients died from non-suicidal drug overdose (mainly barbiturates) and one from accidental head injury sustained in a drug-intoxicated state. Ten deaths occurred in the first five years of follow-up. The mean age at death was 24 years. All deceased patients had been convicted during follow-up and mortality was significantly associated with combined addiction and conviction in the follow-up period ($\chi^2 = 6.73$, $df = 1$, $P < .01$) but with no other variable studied.

Addiction status

Twelve patients, a quarter of those at risk, were known to have used drugs in the last five years and seven of them were notified as drug users in the last two years. Addiction in the second five years of follow-up was significantly associated with daily narcotic use on arrival at the drug clinic ($\chi^2 = 6.64$, $df = 1$, $P < .01$), receipt of a narcotic prescription ($\chi^2 = 7.5$, $df = 1$, $P < .01$), and inpatient treatment for drug dependency ($\chi^2 = 5.14$, $df = 1$, $P < .05$). Ten patients had used soft drugs only on arrival at the clinic. One of this soft drug group subsequently progressed to narcotic drugs and died. The absence of evident differentiating features of this soft drug group from the other narcotic users, on arrival at the clinic, continued throughout the 10 year follow-up period. These soft drug users were no less likely to continue with illicit drug use or to avoid conviction for drug or non-drug offences. Thirty-four of the 10 year survivors had reached 30 years of age at follow-up but advancing age was not associated with eventual abstinence.

Conviction status

Twenty-nine patients of the original 60 had been convicted before their first drug use, while 55 of them were convicted by the time of arrival at the drug clinic. All but two of the 60 had been convicted by the end of the 10 year follow-up. Fifty patients (83 per cent) received convictions during the whole 10 year follow-up, half of them in the last five years. Conviction in this last period was significantly associated with a history of conviction before drug use ($\chi^2 = 5.96$, $df = 1$, $P < .02$) and failure to attain any national school examination ($\chi^2 = 7.57$, $df = 1$, $P < .01$). The pattern

TABLE I
Pattern of offence behaviour

Type of offence	At first clinic attendance		During 10 year follow-up		Total conviction status at 10 year follow-up	
	No. of offenders	No. (%) of offences	No. of offenders	No. (%) of offences	No. of offenders	No. (%) of offences
Larceny	44	139 (39)	33	115 (34)	52	254 (36)
Fraud	10	16 (4)	18	61 (18)	23	77(11)
Drugs	28	63 (17)	25	66 (19)	40	129 (18)
Violence	26	42 (12)	18	40 (12)	36	82 (12)
Obstructive	8	9 (2)	8	15 (4)	15	24 (3)
Motoring	18	60 (17)	7	31 (9)	20	91 (13)
Vagrancy	7	7 (2)	3	5 (1)	7	12 (2)
Sex	4	6 (2)	4	8 (2.5)	8	14 (2)
Drink	5	19 (5)	2	2 (0.5)	5	21 (3)
Total No.		361		343		704

TABLE II
Most serious conviction outcome in 10 year follow-up

Outcome	No. of offenders
Prison beyond 1 year	12
Prison from 3–12 months	15
Detention centre	1
Prison up to 3 months	3
Supervision order	6
Fine	10
Conditional discharge	3
No conviction	10
Total	60

of offences (Table I) did not alter significantly during follow-up. After 10 year follow-up, 52 out of 60 patients had received a conviction for larceny, and about two thirds for a drug offence and an indictable offence of violence. Repeated conviction for a drug offence was significantly associated with receipt of a clinic narcotic prescription ($\chi^2 = 4.79$, $df = 1$, $P < .05$), a conviction for an offence of violence ($\chi^2 = 5.39$, $df = 1$, $P < .05$) and imprisonment for longer than 3 months ($\chi^2 = 12.97$, $df = 1$, $P < .001$). Conviction outcome during follow-up is detailed in Table II. Thirty-one patients served a penal sentence in the 10 year follow-up period. Imprisonment during follow-up was not associated with eventual abstinence.

Combined addiction and conviction status of survivors

During the 10 year follow-up, eight patients remained free from conviction and addiction. Variables examined for this group (Table III) show that this successful outcome was significantly associated with the attainment of some national school examination ($\chi^2 = 6.49$, $df = 1$, $P < .02$), a pass in an 'O' level examination ($\chi^2 = 7.91$, $df = 1$, $P < .01$), no conviction before drug use ($\chi^2 = 4.53$, $df = 1$, $P < .05$) and no prison sentence greater than three months in the first five years of follow-up ($\chi^2 = 10.54$, $df = 1$, $P < .01$).

In the latest five years of follow-up, 20 patients remained free from conviction and known addiction. In comparison with other survivors who continued to be addicted and/or convicted in this period, successful outcome in these patients was significantly associated with an absence of conviction before drug use ($\chi^2 = 6.53$, $df = 1$, $P < .02$), attainment of some national school examination ($\chi^2 = 6.41$, $df = 1$, $P < .02$), no prison sentence greater than three months in the first five years of follow-up, no prison sentence over one year at 10 year follow-up ($\chi^2 = 4.73$, $df = 1$, $P < .05$) and a lower annual conviction rate at 10 year follow-up ($t = 2.28$, $P < .05$).

Comparison between this good outcome group of 20 patients (free from addiction or conviction for five years) and the poor outcome group of eight patients (both addicted and convicted in this time) shows that good outcome is significantly associated with attainment of an 'O' level examination ($\chi^2 = 4.48$, $df = 1$,

TABLE III
Variables related to outcome at 10 year follow-up

Variable	No drug use or conviction in		No drug use of conviction in		Addicted and convicted in last 5 years	Convicted only in last 5 years	Addicted only in last 5 years
	Deceased	10 years	last 5 years	last 5 years			
No of patients	11	8	12	8	17	4	
(1) Parental loss before 16 years	6	1	6	6	5	1	
(2) No school examination	9	2	6	6	14	2	
(3) 'O' level examination	1	5	3	0	3	2	
(4) Conviction before drug use	6	1	4	5	11	2	
(5) Weekly opiate use on arrival	8	5	5	7	9	4	
(6) Daily opiate use on arrival	6	4	3	6	8	4	
(7) Receipt of narcotic script	8	4	4	6	6	4	
(8) In-patient treatment	9	5	8	8	12	4	
(9) Prison sentence over 3 months in first five years	7	0	6	5	13	1	
(10) Prison sentence over 1 year in first 5 years	1	0	1	4	4	1	
(11) Ever sentenced for 3 months	9	3	7	5	13	1	
(12) Ever sentenced for 1 year	2	1	1	4	6	1	
(13) Average conviction rate/year	1.02	0.30	0.45	0.93	1.13	0.26	
		0.40		0.96			

$P < .05$), and inversely associated with parental loss before 16 years ($\chi^2 = 4.39$, $df = 1$, $P < .05$), imprisonment for one year in the first five years of follow-up ($\chi^2 = 7.88$, $df = 1$, $P < .01$) and imprisonment for one year by the end of follow-up ($\chi^2 = 5.43$, $df = 1$, $P < .02$).

Discussion

Criminality, rather than addiction, emerges as the dominant deviant behaviour in the life of these clinic patients. At 10 year follow-up, 97 per cent had received a court conviction, but 48 per cent were already convicted before their first illicit drug use—findings replicated by Weipert *et al* (1977) in two other London drug clinic populations. During the 10 year follow-up period, 83 per cent of patients were convicted. Although only one quarter of the 10 year survivors used drugs in the last five years, half were convicted in the same period.

The incidence of mortality in the sample (18 per cent) is slightly higher than in other British clinic studies (Thorley *et al*, 1977; Stimson *et al*, 1978) which span shorter durations. Eventual death from addiction was not predictable on arrival at the clinic from any factors examined, and occurred in the earlier, rather than the later years, of follow-up. Death emerged as an accidental risk of dependency but was most likely to occur when addiction was combined with criminal behaviour during follow-up.

Dependency in this sample diminished with time but this did not relate to age maturation, to medical treatment or penal containment. Continued dependency was associated with the main premises of British drug policy, narcotic prescription and inpatient treatment. Neither outpatient clinic treatment, inpatient treatment nor penal detention emerged as significant factors in eventual abstinence. As the dependent group at follow-up were also the heaviest narcotic users on arrival at the clinic, it is understandable that they would be the most likely to receive a clinic prescription and be offered inpatient treatment.

A prolonged period of abstinence is often considered an important component in the successful outcome of addictive disorders. Imprisonment might seem to offer such an opportunity for enforced abstinence but, although 47 per cent of these patients were imprisoned for at least three months during follow-up, they were no more likely to remain abstinent than undetained patients. The small group of exclusive soft drug users in the sample remained indistinguishable in conviction and/or addiction outcome from narcotic users, supporting the initial proposal that soft drug users who present to a drug clinic form an atypical group, aligned in behaviour with narcotic users.

The extensive and continued criminality of these patients remains their main characteristic. It is difficult to conceive of a patient group, presenting primarily for medical care, who could approach a conviction rate of 97 per cent. The continuation of criminal behaviour at follow-up was predicted on arrival at the clinic by a record of conviction before drug abuse and poor educational attainment. The influence of early parental loss which related to outcome at earlier follow-up (Gordon, 1978a), no longer emerges so significantly as a precursor of continued delinquency. These findings suggest that a criminal record combined with a lack of educational success presents a major impediment to successful recovery and rehabilitation. Even though personal adult relationships may develop despite parental deprivation, poor scholastic achievement and criminality combine to hamper effective social adjustment.

The pattern of offences has not varied significantly during the 10 year follow-up. Larceny and drug offences predominate, but 66 per cent of the sample have received a conviction for a indictable offence of violence. There is no evidence to suggest that the potential for violence in these patients has diminished with age during follow-up. Receipt of clinic prescription for narcotics did not reduce the incidence of a drug conviction but was associated with an increased incidence of drug conviction—a finding shared by the London clinic study of Wiepert *et al* (1979). A history of repeated drug offences was not only associated with receipt of a narcotic prescription but also with a history of conviction for violence and imprisonment for longer than three months. These observations suggest that a history of repeated drug offences relates more to criminality than to addiction alone (Gordon, 1978b).

The assessment of a 10 year outcome in combined terms of addiction and conviction supports the premise that drug dependency is predominantly an expression of social deviancy. Poor outcome, either throughout follow-up or in the later stage of follow-up, was associated with such factors as parental loss, a lack of academic achievement, conviction before drug use, imprisonment for one year and a higher annual conviction rate—all findings which relate more recognizably to criminality than to addiction.

The observations of this survey are reflected in many of the questions posed by Edwards in his review of British drug policy (Edwards, 1979). Although drug addicts in the 70's may have responded to the lure of prescribed narcotics, there is no evidence here that prescription of narcotics has contributed to eventual abstinence and some indication that it might actually have hindered its development.

Increasing recognition of the criminal involvement of many drug users may have encouraged the use of

coercive penal measures in management, but penal detainment alone appears ineffective in terms of eventual abstinence. Soft drug users who seek help from drug clinics appear in this survey as quite as socially disturbed as narcotic users, although their predicament is less frequently accepted by many drug clinics. Edwards asks whether an essentially medical model is the most appropriate approach to drug addiction. This survey indicates that the pathology of drug dependency extends beyond the definition of a pure physiological dependency. The links between crime and addiction revealed by this study indicate the importance of a combined medical and social approach in the assessment and management of drug abuse.

Acknowledgements

Thanks are due to the Home Office Research Unit, the Home Office Drugs Branch, consultant psychiatrists, general practitioners and voluntary agencies who co-operated with this study.

References

- BELL, D. S. & CHAMPION, R. A. (1979) Deviancy, delinquency and drug use. *British Journal of Psychiatry*, **134**, 269–78.
- COCKETT, R. (1971) *Drug Abuse and Personality in Young Offenders*, London: Butterworths.
- D'ORBAN, P. T. (1970) Heroin dependence and delinquency in women—a study of heroin addicts in Holloway Prison. *British Journal of Addiction*, **65**, 67–78.
- (1973) Female narcotic addicts: a follow-up study of criminal and addiction careers. *British Medical Journal*, *iv*, 345–7.
- (1974) A follow-up study of female narcotic addicts: variables related to outcome. *British Journal of Psychiatry*, **125**, 28–33.
- EDWARDS, G. (1979) British policies on opiate addiction: ten years working of the revised response, and options for the future. *British Journal of Psychiatry*, **134**, 1–13.
- GORDON, A. M. (1973) Patterns of delinquency in drug addiction. *British Journal of Psychiatry*, **122**, 205–10.
- (1978a) Drugs and delinquency: a four year follow-up of drug clinic patients. *British Journal of Psychiatry*, **132**, 21–6.
- (1978b) Do drug offences matter? *British Medical Journal*, **2**, 185–6.
- HILL, D. (1970) Foreword. *Modern Trends in Drug Dependence and Alcoholism*. London: Butterworths.
- JAMES, I. P. (1969) Delinquency and heroin addiction in Britain. *British Journal of Criminology*, **9**, 108–24.
- NOBLE, P. J. (1970) Drug-taking in delinquent boys. *British Medical Journal*, *i*, 102–6.
- HART, T., & NATION, R. (1972) Correlates and outcome of illicit drug use by adolescent girls. *British Journal of Psychiatry*, **120**, 497–504.
- STIMSON, G. V., OPPENHEIMER, E. & THORLEY, A. (1978) Seven-year follow-up of heroin addicts: drug use and outcome. *British Medical Journal*, **1**, 1190–2.
- THORLEY, A., OPPENHEIMER, E. & STIMSON, G. (1977) Clinic attendance and opiate prescription status of heroin addicts over a six-year period. *British Journal of Psychiatry*, **130**, 565–9.
- WIEPERT, G. D., D'ORBAN, P. T. & BEWLEY, T. H. (1979) Delinquency by opiate addicts treated at two London clinics. *British Journal of Psychiatry*, **134**, 14–23.

Alistair M. Gordon, M.Phil., M.R.C.P., F.R.C.Psych., *Medical Director, The Retreat, York, YO1 5BN*

(Received 16 August 1982)