

**THE ROLE OF LEGAL COERCION IN
THE TREATMENT OF OFFENDERS
WITH ALCOHOL AND HEROIN
PROBLEMS**

Wayne Hall
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AND HEROIN PROBLEMS**

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Abstract

This paper discusses the ethical justification and reviews the American evidence on the effectiveness of treatment for alcohol and heroin dependence that is provided under legal coercion to offenders whose alcohol and drug dependence has contributed to the commission of the offence with which they have been charged or convicted. The paper focuses on legally coerced treatment for drink-driving offenders and heroin dependent property offenders. It outlines the various arguments that have been made for providing such treatment under legal coercion, namely, the over-representation of alcohol and drug dependent persons in prison populations; the contributory causal role of alcohol and other drug problems in the offences that lead to their imprisonment; the high rates of relapse to drug use and criminal involvement after incarceration; the desirability of keeping injecting heroin users out of prisons as a way of reducing the transmission of infectious diseases such as HIV and hepatitis; and the putatively greater cost-effectiveness of treatment than incarceration. The ethical objections to legally coerced drug treatment are briefly discussed before the evidence on the effectiveness of legally coerced treatment for alcohol and other drug dependence is reviewed. The evidence which is primarily from the USA gives qualified support for some forms of legally coerced drug treatment, provided that these programs are well resourced, carefully implemented, and their performance is monitored to ensure that they provide a humane and effective alternative to imprisonment. Expectations about what these programs can achieve also need to be realistic.

Legally coerced drug and alcohol treatment is treatment entered into by persons charged with or convicted of an offence to which their alcohol or drug dependence has contributed. It is most often provided as an alternative to imprisonment, and usually under the threat of imprisonment if the person fails to comply with the requirements of treatment. The use of legal coercion to encourage alcohol and drug dependent offenders to undergo treatment for their alcohol and drug problems has been a popular alternative to imprisonment over the past 60 years in the US (Leukefeld and Tims, 1988), and for the past 20 or so years in Australia (e.g. Carney, 1987; Schlosser & Bush, 1983). Treatment under coercion has become a common way of dealing with drink driving offenders; it has also been increasingly used as an alternative to imprisonment for drug and property offenders who are dependent on heroin and other illicit drugs. The expansion of such programs was most recently recommended by the Pennington Committee in Victoria as a way of preventing the correctional system from being overwhelmed by drug offenders (Premier's drug Advisory Council, 1996).

The Case For Treatment Under Coercion

One of the major justifications for drug treatment under coercion is that the alcohol and drug dependence of some offenders contributes to the commission of the offence with which they have been charged or convicted, and that treatment under coercion is an effective way of treating their drug dependence and thereby reducing the likelihood of their re-offending (Inciardi & McBride, 1991). The causal connection between drug dependence and criminal offences is least contentious in the case of drink driving offences where driving with a blood alcohol level above the prescribed limit is defined for very good public health reasons as an offence (Homel, 1990).

The connection between dependent heroin use and property crime is more contentious. There is no doubt that offenders who are dependent on heroin are over-represented in the Australian prison population (Pedic, 1990; Stathis, 1991; Stathis, Bertram & Eyland, 1991). Estimates derived from surveys of drug use among new receptions in Australia suggest a prevalence of injecting drug use (usually heroin) of 18% to 23% of men (Gaughwin, Douglas & Wodak, 1991; Potter & Connolly, 1990; Stathis, Bertram & Eyland, 1991). Prevalence estimates derived from cross-sectional surveys are higher still: 36% to 42% for men (Gaughwin, Douglas & Wodak, 1991), and 70% among women (Gorta & Miner, 1986). These estimates compare with estimates of the prevalence of heroin dependence in the Australian population of 0.4% to 0.7% of adults (Hall, 1996).

The relationship between heroin dependence and property crime is more controversial. Heroin dependence is not a simple and direct cause of crime (Hammersely, Forsyth, Morrison & Davies, 1989) since most Australian heroin users commit criminal offences before they begin to use heroin (Dobinson & Ward, 1985, 1987; Hall, Bell & Carless, 1993). The evidence is nonetheless reasonably persuasive that the development of heroin dependence intensifies criminal involvement (Ball, Shaffer & Nurco, 1983; Dobinson & Ward, 1985, 1987; McGlothlin, Anglin & Wilson, 1978). Moreover, there is reasonable Australian evidence that methadone maintenance treatment reduces illicit heroin use and criminal activity while users remain in treatment (Bell, Hall & Bythe, 1992; Ward, Mattick & Hall, 1992). There is also evidence from the USA that other forms of drug treatment similarly reduce heroin use and crime (Gerstein & Harwood, 1990; Hubbard, Collins, Rachal & Cavanaugh, 1989).

The case for treating heroin dependent offenders under coercion is reinforced by evidence they are very

likely to relapse to drug use on their release, and hence to re-offend and return to prison (Gerstein & Harwood, 1990; Thompson, 1995). If the community wishes to reduce relapse to heroin use and criminal recidivism, and since treatment reduces relapse to heroin use, then coerced treatment provides an alternative to imprisonment that may reduce recidivism.

The advent of HIV/AIDS has provided an additional argument for treating rather than imprisoning heroin dependent offenders. Prisoners who have injected heroin are at higher risk of having contracted HIV and hepatitis by needle-sharing prior to imprisonment (Dolan, 1991; Hammett, 1991; Wodak, Shaw, Gaughwin, Ross, Miller & Gold, 1991); they are also at risk of transmitting these infectious diseases to other inmates by needle sharing and penetrative sexual acts while they in prison; and they are at risk of transmitting these diseases to their sexual partners after their release from prison. Injecting heroin use is less common in prisons than in the community but the limited access to injecting equipment ensures that injecting in prison is especially likely to transmit infectious diseases because large numbers of users share the same needle and syringe without adequate cleaning (Dolan, Hall & Wodak, 1995; Gaughwin, Douglas & Wodak, 1991; Wodak, Shaw, Gaughwin, Ross, Miller & Gold, 1991; Vlahov & Polk, 1988). Although the prevalence of HIV is low in Australian prisons there has been a documented case of HIV transmission by needle-sharing in an Australian prison (Dolan, Hall, Wodak, Hall & Gaughwin, 1994), as there have in American (Vlahov & Polk, 1988), and Scottish prisons (Taylor, Goldberg, Emslie, Wrench, Gruer, Cameron, Black, Davis, McGregor, Follet, Harvey, Basso & McGavigan, 1995). Providing drug treatment under coercion in the community is one way of reducing HIV transmission by reducing the number of injecting drug users in prison.

In the USA the correctional and public health arguments for drug treatment under coercion have been reinforced by the economic argument that it is less costly to treat drug dependent offenders in the community than it is to incarcerate them (Gerstein & Harwood, 1990). The economic appeals of coerced drug treatment as an alternative to incarceration has been given special cogency in the USA by the problem of prison overcrowding that has arisen with the increased use of indeterminate sentences. There are no comparable analyses of the costs of imprisonment and treatment for heroin dependent offenders in Australia but given the large size of the cost differential in the USA, it is also likely to be true in Australia.

Forms of Legal Coercion

Drug and alcohol offenders may be coerced into drug treatment in a variety of ways (Gostin, 1993). This may occur after detection of an offence but before a person has been charged if police exercise their discretion not to charge an offender provided that he or she agrees to enter drug treatment. This form of coercion is not generally favoured because it is not under judicial oversight and it is open to abuse and corruption. Coercion into treatment may also occur after an offender has been charged and is being processed by the court. A court, for example, may look favourably upon enrolment in treatment as evidence of a desire to achieve abstinence and it may accordingly postpone adjudication until treatment has been completed, as happens in some American "drug courts" (General Accounting Office, 1995).

An offender may be coerced into treatment after conviction. If it is done before sentencing, then entering

and completing treatment may be made a condition of a suspended sentence. Alternatively, an offender may be encouraged (but not required) to enter drug treatment to help them remain abstinent from illicit drugs while a sentence is suspended. In this case, remaining drug free would be a condition of receiving a noncustodial sentence rather than enrolment in treatment per se. Drug treatment may also be required after part of a sentence has been served in which case enrolment in community-based drug treatment may be made a condition of release on parole. Alternatively, enrolment in drug treatment may be encouraged as a way of remaining free of illicit drugs while on parole.

The most coercive form of treatment for drug dependence is the type of "civil commitment" that has been used in a number of American states over the past 60 years (e.g. the California Civil Addict Program). In this type of program, an offender was sentenced to enforced treatment for drug dependence in a secure "hospital" for an extended period. Such compulsory treatment was often followed after release by community based drug treatment under supervision (which may have included regular urinalysis). Failure to comply with supervision requirements could result in return to the secure hospital. Although in principle civil commitment did not require a criminal conviction, in practice, most of those who were civilly committed had been charged with other offences (Anglin, 1988), and for them, failure to comply with the treatment program led to transfer to a conventional prison (Gostin, 1993).

These varieties of coercion into drug treatment have very different legal and other consequences for the offenders who may be subjected to them. There has been very little research on how often these types of provision have been used, or on whether they differ in their effectiveness. Most of what has been done has been conducted in the USA on the most highly coercive civil commitment programs (E.g. Anglin, 1988); less research has been done on the less coercive forms of treatment (see below).

Australia has never had anything like the US civil commitment programs (Carney, 1987; Fox, 1992). Instead, most forms of treatment under legal coercion for drug dependence in Australia have involved a convicted offender being offered a constrained choice of imprisonment or some form of treatment (Carney, 1987; Fox, 1992). Even so there is very little Australian data on how often these forms of coercion have been used, and with what effect (Quinlan, 1995). Most reports on these programs have described their rationale and mode of operation rather than evaluating their impact or effectiveness (E.g. Skene, 1987; Rigg & Indermaur, 1996; Williams, 1982).

Ethical Issues in Coerced Treatment

The strongest case for treatment under legal coercion can be made for compulsory educational programs for drink drivers. Drink driving programs seem to be the least problematic because they involve minimal degrees of coercion and inconvenience. Although their effect on drink-driving recidivism may be modest (see below), the degree of inconvenience suffered by offenders is relatively minor, namely, having to undergo a medical assessment of their drinking problems, and having to attend educational and counselling sessions held during the evening or on weekends.

More serious ethical issues are raised by coerced treatment for heroin and other forms of illicit drug dependence. These forms of treatment under coercion involve offenders being required to attend treatment for substantial periods of time and to assume burdens of treatment that are much more

substantial than the loss of some leisure time. They may, for example, require offenders to spend 3 or more months residing in a therapeutic community, or to attend a methadone clinic daily over several years for dosing with methadone, or to be involved in long-term weekly out-patient counselling.

There are some who reject any form of treatment under coercion for heroin or any other form drug dependence, even if it imposes minor burdens on participants. Szasz (Szasz, 1985), for example, refuses to recognise that there is such an entity as heroin (or other drug) dependence, preferring to regard all drug use as voluntary, and hence, as not requiring treatment. On his view, the law should not prohibit the use of any drug by adults, and any drug user who commits a criminal offence should be punished in the customary way, with no extenuation by reason of drug dependence. This heroic form of libertarianism does not enjoy wide public support.

Ethical issues remain even if we reject Szasz's brand of libertarianism and his scepticism about the existence of drug dependence. Newman (Newman, 1974), for example, accepts that addiction exists but nonetheless opposes compulsory drug treatment on the grounds that it is "void of benefits and counterproductive of the goals that form the rationale for depriving people of their liberty". Newman's objection raises the question: can we successfully treat drug dependent offenders under legal coercion? If treatment under coercion is ineffective (as Newman claims), then there would be no ethical justification for providing it. Of course, even if treatment under coercion is effective, it does not necessarily follow that it should be provided because the community may place a higher value on punishing than rehabilitating drug offenders. Indeed, the enthusiasm for treatment and rehabilitation of alcohol and drug dependent offenders is very much against the current of contemporary penological thinking about the purposes of punishment which emphasises retribution ("just deserts") rather than rehabilitation (Duff & Garland, 1994).

American evidence suggests that treatment for heroin and other illicit drug dependence, such as, methadone maintenance, therapeutic communities and drug free counselling, is of benefit to those who receive it (Gerstein & Harwood, 1990; Hubbard, Marsden, Rachal, Harwood, Cavanaugh & Ginzburg, 1989). Persons who enter treatment for heroin and other illicit drug dependence are more likely than those who do not to reduce their heroin use and to show improvements in their health, well-being and social functioning (Gerstein & Harwood, 1990; Hubbard, Marsden, Rachal, Harwood, Cavanaugh & Ginzburg, 1989). But the benefits for any individual are still uncertain since treatment benefits a bare majority of those who receive it (Gerstein and Harwood, 1990), and the rate of relapse to heroin use after treatment is substantial. The uncertain results of treatment for heroin dependence must temper our enthusiasm for a whole-hearted embrace of treatment under coercion as the solution to problems of recidivism, infectious disease transmission, and prison costs and overcrowding.

The uncertain benefits of treatment for individuals who are drug dependent also raise strong doubts about the ethical justification for "civil commitment". It seems difficult to justify the degree of intrusive oversight and supervision that was applied for up to seven years under the California Civil Addict Program when the benefits to the affected individuals were uncertain. The community may also begin to wonder about the wisdom of allocating substantial resources to such programs when there is limited provision in the community for the "voluntary" treatment of heroin and other drug dependence.

A consensus view on treatment under coercion was reached by the World Health Organization in 1986 (Porter, Arif & Curran, 1986). This group suggested that compulsory treatment was legally and ethically justified only if the rights of the individuals were protected by "due process", and if effective and humane treatment was provided. In the absence of due process, the way was left open for *de facto* imprisonment to occur without judicial oversight. In the absence of humane and effective treatment, coerced drug treatment could become a simple cost-cutting exercise to reduce prison over-crowding. If ineffective treatment was provided, and there were no credible sanctions for noncompliance with the program, then coerced treatment would also bring drug treatment into disrepute.

The uncertain benefits and individual burdens of treatment have led many proponents of legally coerced treatment to argue that offenders should be allowed at least two types of "constrained choice" (Fox, 1992). The first constrained choice would be whether or not they participate in treatment. Those who declined to be treated would be processed by the criminal justice system in the standard way for someone charged with their offence. The second constrained choice would arise for those who agreed to participate in treatment, namely, a choice as to the type of treatment that they received.

Gerstein and Harwood (1990), for example, argue that there is better evidential and ethical support for coerced treatment that requires some "voluntary interest" on the part of the client. Joseph (1988) has also proposed that parolees be given a choice of both a treatment approach (e.g. methadone maintenance, residential treatment, or drug free counselling) and the particular program that provides the treatment of their choice. Kleiman (1993) has argued for a greater degree of choice under a weaker form of coercion. On his argument, drug treatment would not be a legal requirement of parole, but parolees would be encouraged to enter drug treatment as a way of meeting the parole requirement that they abstain from using illicit drugs.

Ethical concerns about treatment for drug dependence under coercion also arise as a result of ways in which the correctional and drug treatment systems interact (Platt, Buhringer, Kaplan, Brown & Taube, 1988; Reynolds, 1992; Rotgers, 1992; Sheldon, 1987; Skene, 1987). A major problem is the conflicting expectations of correctional and treatment personnel about the effectiveness of drug treatment, and of each other's roles and responsibilities.

Treatment staff usually see the drug offender as their client and, hence, as someone who should be involved in making treatment decisions and as someone to whom they owe an obligation to respect the confidentiality of information provided. Treatment staff also expect that their clients will have relapses to drug use and believe that they should be dealt with therapeutically rather than punitively. Correctional and judicial personnel, by contrast, often expect treatment to produce immediate and enduring abstinence. They may see treatment as something directed by the court, and hence regard any instances of drug use in treatment as breaches that treatment staff should report. When these expectations of treatment effectiveness are not met, and there is little communication between courts and treatment services, judges and magistrates may become sceptical about the value of coerced treatment and reduce their use of it, as appears to have happened in New South Wales (Baldwin, 1979) and Victoria (Skene, 1987). The effective and ethical use of coerced drug treatment accordingly requires a shared understanding of the likely benefits of treatment, and a clear statement of the roles of correctional and treatment staff, including agreement upon their respective responsibilities for monitoring and reporting

upon an offender's progress in drug treatment (Williams, 1982).

Evidence of the Effectiveness of Coerced Treatment

The evidence on the effectiveness of legally coerced treatment alcohol and heroin dependent offenders which is primarily from the USA is reviewed separately. This may seem anachronistic since alcohol is a psychoactive drug but there are nonetheless good reasons for doing so. First, the different legal status of alcohol and heroin and other illicit drugs affects the characteristics of the individuals who become dependent upon them. Generally, heroin dependent offenders are more criminally involved than drink-driving offenders, for example. Second, as noted above, there are also major differences in the degree of coercion involved, and in the burden of treatment imposed upon the two types of offender.

Offenders with Alcohol Problems

The most widely used form of treatment under coercion in the USA (and probably Australia) is the diversion of drink-driving offenders into brief treatment interventions (Weisner, 1990). These have primarily been brief interventions (typically over hours or days) in which educational material is presented with the aim of breaking the connection between drinking and driving rather than treating offenders' drinking problems (Wells-Parker, 1994; Wells-Parker, Banget-Drowns, McMillen & Williams, 1995). Most evaluations of these programs have lacked comparison groups and they have generally only assessed the programs' impact on rates of drink driving offending rather than on alcohol consumption or other alcohol-related problems. The benefits of the better diversion programs appears to have been an 8-9% reduction in drink-driving recidivism (Wells-Parker, Banget-Drowns, McMillen & Williams, 1995). The modesty of the benefit is not surprising given the minimal nature of the interventions (Wells-Parker, 1994).

Brief interventions of the type that are given to drink driving offenders have been shown to reduce alcohol consumption in patients in general medical settings (Mattick & Jarvis, 1992). They are less likely to be effective in a population of drink drivers whose average severity of alcohol problems falls somewhere between the hazardous drinking patterns found in many medical settings and the pattern of dependent drinking found among the clientele of specialist alcohol treatment centres (Wells-Parker, 1994). Drink driving populations contain a substantial minority of individuals with severe alcohol problems who require more intensive interventions to change their alcohol use. They also contain a larger group who require more than brief educational interventions but less than the standard treatment for severely dependent drinkers, such as, inpatient detoxification and residential treatment, with encouragement to enrol in Alcoholics Anonymous (AA).

Compulsory referral to AA has recently become popular in the USA as an inexpensive way for the state to deal with drink drivers and other offenders with alcohol problems (Weisner, 1990). This would seem a doubly unsuitable approach to treatment under coercion: compulsory referral is at odds with the AA treatment philosophy that emphasises self-help and voluntary participation; and only a minority of drink driving offenders have alcohol problems of sufficient severity that they are likely to benefit from the self help approach of AA. The few controlled evaluations of this approach have also produced little evidence of benefit from compulsory AA treatment (Wells-Parker, Banget-Drowns, McMillen &

Williams, 1995).

The most widely used forms of treatment under coercion for drink driving offenders are the least likely to be effective, as is generally true of alcohol treatment (Institute of Medicine, 1990). The effectiveness of diversion programs for drink drivers could be enhanced by using more effective interventions to change the offenders' alcohol problems. The limited research evidence suggests that the more intensive alcohol treatment programs (e.g. those involving regular outpatient counselling over a period of weeks to months) produce larger reductions in recidivism (Wells-Parker, Banget-Drowns, McMillen & Williams, 1995).

More intensive interventions may be most useful for drink driving offenders who have re-offended. Provided that offenders have a choice as to whether they participate, these might include *supervised* administration of disulfiram ("Antabuse") in the community. Disulfiram is an agent that produces nausea and vomiting when alcohol is consumed. When used as a pharmacological support for abstinence it has been shown to reduce relapse to drinking if compliance is maximised by giving the drug under supervision (Mattick & Jarvis, 1993). The use of supervised disulfiram as part of a more comprehensive approach has been described by Azrin and colleagues in their studies of a "community reinforcement" (Azrin, Sisson, Meyets & Godley, 1982). This is a potentially cost-effective alternative to imprisonment for repeat offenders that is deserving of careful trial and evaluation.

Consideration should also be given to trialing the newer amethystic agents, such as naltrexone. These agents differ from disulfiram in that they purportedly reduce "craving" for alcohol after alcohol dependent persons have been successfully withdrawn from alcohol (rather than making drinkers ill if they consume alcohol). Two randomised controlled trials of naltrexone have reported that it halved the rate of relapse to drinking over a period of three months after treatment (Litten & Allen, 1993). Patients reported that naltrexone reduced their craving for alcohol and the rewarding effects of alcohol if they drank (Litten & Allen, 1993). If these promising results are replicated by other investigators, and if they hold up over a year or more, naltrexone could be used to treat recidivist drink drivers.

An issue worth briefly considering is whether treatment under coercion should be used for alcohol dependent persons charged with offences other than drink-driving, such as, offences against public order, or offences against the person committed while they are intoxicated. This option might appeal, for example, as a way of reducing the high rates of incarceration of Aboriginal Australians for alcohol-related offences (Hall, Hunter & Spargo, 1994). Decriminalisation of drunkenness may be a more useful way of reducing the number of offenders being incarcerated in police cells for simple drunkenness. Court-ordered treatment may have more attraction for repeat offenders whose violent acts while intoxicated threaten the safety of family members.

There is very little research on the effectiveness of coerced treatment for offenders with chronic alcohol dependence, despite the fact that some Australian jurisdictions still have legislation that permits the involuntary hospitalisation and treatment of "inebriates" for up to six months (MacAvoy & Flaherty, 1990). Inebriates statutes have largely fallen into disuse because of pessimism on the part of magistrates and treatment staff about the effectiveness of compulsory treatment for alcohol dependence. Their lack of use is supported by the consensus in recent reviews of the research literature that the coerced

treatment of alcohol dependent offenders for offences other than drink-driving is ineffective (Rotgers, 1992; Stitzer & McCaul, 1987; Weisner, 1990).

Offenders with Illicit Drug Problems

Treatment under coercion for illicit drug users has been most often used with persons who are heroin dependent. Civil commitment of heroin dependent offenders was first used in the USA in the 1930s when the Public Health Service created two prison hospitals for the treatment of opioid dependence in Lexington, Kentucky (1935) and Fort Worth, Texas (1938). There was a renewed enthusiasm for this approach in the 1960s with programs of civil commitment in California and New York. In the 1970s Treatment Alternatives to Street Crime introduced treatment diversion programs for primarily heroin dependent offenders (Leukefeld & Timms, 1988; Inciardi & McBride, 1991). More recently, "drug courts" have been established in 15 American states to provide court-supervised treatment for heroin and cocaine dependent offenders as an alternative to imprisonment (General Accounting Office, 1995).

Research into the effectiveness of these programs has been limited to a small number of observational studies of heroin dependent offenders. One of the first of these was Vaillant's (1973, 1988) 20 year longitudinal study of a cohort of 100 New York heroin addicts who entered treatment at Lexington Hospital in the early 1950s. Vaillant identified four factors that were associated with abstinence from heroin use for three or more years. One of these was imprisonment followed by parole supervision for a year or more in the community. Although Vaillant's ability to test alternative explanations of the association was limited, he was able to show that those who received parole for a year or more had a worse prognosis (based on their history of drug use and crime) than those who had not been placed on parole, and yet they were still more likely to be abstinent. According to Vaillant (1988), parole was useful because it "altered an addict's schedule of reinforcement", required weekly proof of employment, altered friendship networks, and provided "an external source of vigilance against relapse".

More convincing evidence of the effectiveness of drug treatment under coercion has been provided by Anglin and colleague's studies of the California Civil Addict Program (reviewed by Anglin, 1988). These quasi-experimental studies compared heroin dependent offenders who entered the Civil Addict Program (CAP) between 1962 and 1964 with that of a group of similar offenders who were processed by the criminal justice system during the same period. The findings indicated that compulsory hospital treatment followed by close supervision in the community (including monitoring of drug use by urinalysis) produced substantial reductions in heroin use and crime among CAP participants. The reductions also occurred sooner among CAP participants than among those who were imprisoned. Anglin and colleagues later observed in the early 1970s that methadone maintenance produced larger reductions in drug use and crime among those who were still actively addicted than those achieved by CAP.

The effectiveness of less coercive forms of treatment as alternatives to imprisonment has been supported by analyses of the effect of "legal pressure" (i.e. treatment while on probation or parole) on the outcome of community-based drug treatment for primarily heroin dependent offenders (E.g. Hubbard, Collins, Rachal & Cavanaugh, 1988, 1989; Simpson & Friend, 1988). These studies analysed outcome data collected in two major evaluations of community-based drug treatment, the Drug Abuse Reporting Program (DARP) (Simpson, Joe, Lehman & Sells, 1986) and the Treatment Outcome Program Studies (TOPS) (Hubbard, Marsden, Rachal, Harwood, Cavanaugh & Ginzburg, 1989). Both studies showed

that drug dependent individuals who entered community-based Therapeutic Communities and drug-free out-patient counselling under "legal pressure" did as well as those individuals who were not under such "legal pressure" (Simpson, & Friend, 1988; Hubbard, Collins, Rachal & Cavanaugh, 1988). The findings on therapeutic communities were supported by De Leon's (1988) studies of treatment outcome among individuals entering Therapeutic Communities under legal pressure. De Leon showed that the relationship between treatment outcome (measured in terms of drug use and crime) and time in treatment was the same for those who did and did not enter treatment under legal coercion. A small Australian prospective study of court-diverted and self-referred heroin users has produced more equivocal evidence of benefit (Desland & Batey, 1992).

There were too few individuals who entered methadone maintenance treatment under legal pressure in the DARP studies to investigate the effects of coercion on the outcome of methadone maintenance treatment for heroin dependent persons. The lack of coerced participants in methadone maintenance treatment reflected the prejudice against this form of treatment on the part of judges who regarded it as a continuation of addiction, and preferred treatment programs that aimed to achieve abstinence from all drugs (Leukefeld & Timms, 1988).

Given the strong evidence for the effectiveness of community-based methadone maintenance treatment in reducing illicit opioid use and crime (Ward, Mattick & Hall, 1992), and the evidence that coercion does not impair the effectiveness of other forms of drug treatment, one would expect that offenders who enter methadone under legal coercion would benefit from it. This expectation has been supported by a variety of studies. The strongest evidence comes from the results of one of the few studies in which illicit drug offenders were randomly assigned to parole with and without community-based methadone maintenance treatment (Dole, Robinson, Oracca, Towns, Searcy & Caine, 1969). This showed a much greater reduction in heroin use and substantially lower rates of incarceration among those enrolled in methadone maintenance treatment in the year after release from prison.

The results of the Dole et al study are supported by observational studies of methadone maintenance treatment under coercion in California (Anglin, Brecht & Maddahian, 1989; Brecht, Anglin & Wang, 1993). These studies have shown in two large samples of Californian heroin addicts that there were no major differences in response to treatment between those who enrolled under legal coercion and those who did not. Both groups showed substantial reductions in heroin use and criminal behaviour while enrolled in methadone. If anything, the group entering treatment under coercion showed a larger reduction in criminal behaviour because they engaged in more criminal activity before they entered treatment. Similar results have been obtained from analyses of the effects of legal coercion on methadone treatment in the TOPS study (Hubbard, Collins, Rachal & Cavanaugh, 1988), and from Joseph's (1988) experience with methadone treatment in New York.

Not all evaluations of treatment of heroin dependence under legal coercion have produced positive results. The Public Health Hospitals in Lexington and Fort Worth, for example, produced only minimal improvements in outcome (Maddux, 1988). This is unsurprising since treatment consisted of detoxification and psychoanalytically oriented group therapy while in hospital, and there was no well organised form of post-treatment supervision (Maddux, 1988). Similarly, the New York civil commitment program that was introduced in the late 1960s was nowhere near as effective as its

Californian counterpart (Inciardi, 1988). This was largely because the program attempted to create a new and separate treatment bureaucracy rather than using existing community-based treatment programs. It was located in former prisons, it was forced to use former prison officers as "therapists", and it was administered by political appointees who had no experience in drug and alcohol treatment (Inciardi, 1988).

What distinguishes effective from ineffective drug treatment under legal coercion? The consensus view of researchers and practitioners convened by the US National Institutes of Drug Abuse in 1987 (Leukefeld & Timms, 1988) was that "long-term client aftercare and monitoring is an essential part of treatment". They also agreed that methadone maintenance treatment provided an effective way of ensuring that clients remained in treatment and that this needed to be more clearly presented to personnel in the criminal justice system who were biased against methadone as a treatment approach.

Some Caveats

On balance, there is reasonable evidence that all major forms of community based treatment for heroin dependence are effective in reducing heroin use and crime, regardless of whether they are provided under "legal pressure" or not. The evidence is most persuasive for methadone maintenance treatment and it is reasonably consistent and persuasive for drug-free forms of treatment such as therapeutic communities and out-patient counselling. Nonetheless, there a number of reasons why our confidence in this conclusion needs to be qualified.

First, the evidence is largely observational, and hence, we must rely upon statistical methods to test alternative explanations of the apparent benefits of treatment. Although evidence from controlled trials is desirable it is also true that if we are not prepared to act on observational evidence we will be unable to make any decisions about treatment under coercion because of the enormous difficulties in conducting randomised controlled trials.

Second, there are only a limited number of replications of the more positive findings on treatment under coercion and these primarily come from American studies of the treatment of heroin dependent offenders from the 1950s, 1960s and 1970s. There are understandable questions about the applicability of US experience to that of other cultural settings, such as Australia. There is reasonable evidence that American experience with community based methadone treatment has been replicated in Australia (Ward, Mattick & Hall, 1992), but the applicability of American experience with coerced treatment to Australia is best assessed by undertaking research on the outcomes of drug treatment under coercion among more recent groups of heroin dependent offenders in other countries, including Australia.

Third, the US evidence on the effectiveness of treatment under legal coercion may not even be applicable to contemporary American conditions, let alone different cultures. It comes from a period when US prisons were not overcrowded and overwhelmed by drug offenders, as they now are, and when there was a comprehensive community-based treatment system that no longer exists (Gerstein & Harwood, 1990). In the case of the most effective programs, moreover, the period when these

schemes were well resourced and delivered in an effective way was short-lived. The CAP program, for example, did not survive Reagan's governorship in California, and the publicly-funded community-based methadone program did not survive his Presidency.

Fourth, many of the programs that were inspired by the early positive reports were starved of funds and resources, lacked good leadership or were poorly implemented. Many of these programs began with good intentions but when resources became scarce choices between rehabilitative and custodial goals were usually resolved in favour of the latter. The effectiveness of some programs has also been impaired by a lack of clarity about their goals and by conflicting expectations between judicial and treatment personnel about the consequences of continued drug use. Such programs accomplish little beyond confirming the pessimism of those who believe that drug offenders are irredeemable, and hence that any form of drug treatment is a waste of time and money. This seems, for example, to have been the experience in Australian diversion programs for drug offenders which have been curtailed because of dissatisfaction with their effectiveness by both judicial officials and treatment personnel (Baldwin, 1979; Skene, 1987). In other cases, the shortage of treatment places in the community has meant that such programs come to serve the unintended function of providing assessment for the courts rather than diversion into treatment (Rigg & Indermaur, 1996).

For all these reasons, the research literature on the effectiveness of drug treatment under legal coercion probably provides an optimistic assessment of its likely effectiveness under contemporary conditions in our over-crowded and under-resourced criminal justice and treatment systems. We accordingly need to heed the warning issued by Gerstein and Harwood (Gerstein & Harwood, 1990, p 10) that an increased resort to coerced treatment as a way of solving prison overcrowding may impair the effectiveness of coercion: " The more overcrowded and strained the criminal justice system, the less pressure it can muster to help push any particular individual into seeking and complying with treatment").

This is not an argument against the use of drug treatment under coercion as an alternative to imprisonment; it is a warning that the effectiveness of legally coerced treatment will be impaired if such programs are poorly resourced and managed, and if they are driven by unrealistic expectations of what can be achieved. It signals the need to temper our expectations about the impact of legally coerced drug treatment (Platt, Buhlinger, Kaplan, Brown & Taube, 1988).

The most plausible argument for legally coercing drug offenders to enter drug treatment is not that it is an extremely effective intervention but because the alternative of imprisonment is so expensive and ineffective in reducing drug use and crime. As the Institute of Medicine report **Treating Drug Problems** argued:

"... the most important reason to consider these and related schemes to compel more of the criminal justice system to seek treatment is not that coercion may improve the results of treatment but that treatment may improve the rather dismal record of plain coercion - particularly imprisonment - in reducing the level of intensity of criminal behavior that ensues when the coercive grip is released" (Gerstein & Harwood, 1990, p 11)

Conclusions

The most ethically defensible form of legally coerced treatment for drug dependent offenders is probably the use of imprisonment as an incentive for treatment entry, and the fear of return to prison as a reason for complying with drug treatment while on parole. Offenders should still have a constrained choice as to whether they take up the treatment offer, and, if they choose to do so, they should have a choice of treatment options, rather than being compelled to enter a particular form of treatment.

Civil commitment is the least defensible form of coerced treatment because of the lack of choice for the offender, the burdens of treatment, and the uncertainty that individual offenders have of benefiting from coerced treatment. Even if civil commitment was ethically acceptable, we are unlikely to have the necessary resources to replicate the positive results of the California Civil Addict Program. No other US programs has succeeded in doing so and the CAP itself did not endure.

More effective forms of drug treatment should be used in legally coerced drug treatment. This is as true of programs for drink-drivers as it is of coerced treatment for heroin dependent offenders. Advocates of coerced drug treatment need to provide a strong case for methadone maintenance as an alternative to imprisonment, and as a way of reducing relapse among drug offenders on parole.

The expansion of treatment under coercion requires funding of additional treatment places. The failure to do so will place an undue burden on existing community-based treatment services, thereby depriving those who voluntarily seek treatment from receiving it. It also runs the risk of impairing the effectiveness of community-based treatment if treatment staff are demoralised after being overwhelmed by large numbers of reluctant and resentful clients.

There is a need to evaluate the effectiveness and cost-effectiveness of treatment under coercion. This is to ensure that we are not wasting scarce treatment resources on unsuitable clients, that the programs provide effective and humane treatment, and that they provide a credible alternative to imprisonment rather than being seen by offenders and correctional staff as a "soft option" to be exploited by those who wish to evade imprisonment. Above all else, we need to be realistic about what these programs can deliver. They are not a panacea for drug-related crime, or prison over-crowding, but "the absence of a panacea does not excuse society from responding with the tools at hand and to the best of its ability. The overall costs of drug problems are so high that reducing them even modestly is worthwhile" (Gerstein & Harwood, 1990, p 299).

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