A therapeutic response or ‘a free fix’? 
The Irish experience of methadone maintenance treatment.

Tony Carlin, Probation & Welfare Service

Summary
This paper will initially outline the prevalence of methadone maintenance treatment in the European and Irish context. The second section will then highlight the main benefits of methadone maintenance to both the individual and society, using the work of Nyswander and Dole in the 1960s as the starting point. This will be followed by a discussion of reasons for opposition to its use. The fourth section will look at abstinence-oriented methadone reduction treatment as an alternative to methadone maintenance and in doing so will outline its shortcomings. The concluding part of this paper will focus specifically on methadone maintenance in the Irish context and the ambivalence that surrounds its use. The paper concludes by proposing that while methadone maintenance is by no means a perfect solution, it is nonetheless, to date, the most pragmatic and successful treatment response to opiate dependency.

Keywords Methadone, maintenance, abstinence, opiate, dependency, addiction, harm reduction.

Introduction
Methadone maintenance is defined by Ward, Mattock and Hall (1999; 1) as:

The administration of a long-acting opioid drug to an opioid dependent person by a non parental route of administration, for the therapeutic purposes of preventing or substantially reducing the injection of illicit opioids such as heroin.

Methadone maintenance treatment is a subject, which has traditionally elicited strong views, often resulting in a form of trench warfare between its advocates and opponents. As a treatment response to opiate dependency, it is becoming increasingly used in Ireland and most of Europe. While a strong evidence base supports its efficacy and benefits, opponents argue that it reduces motivation towards recovery and discourages the development of a healthy view of the future, (Cumberton et al. 2004). They also argue that methadone only deals with the symptoms rather than the real problems at the base of a person’s addiction and that it prevents real solutions (Coolmine Therapeutic Community, undated).

The prevalence of methadone maintenance treatment programmes
According to the Substance Abuse and Mental Health Services Administration (SAMHSA, 1992), methadone hydrochloride is the most widely used pharmacological treatment agent for opioid dependence in the world. Since it was first synthesised in Germany in the 1940s, hundreds and thousands of individuals addicted to heroin have been treated with it. According to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), there was a seven-fold increase between 1993 and 2000 in the number of heroin addicts being treated with
methadone. The EMCDDA’s 2003 annual report estimated the figure of people being treated in the EU and Norway as 390,611. According to Marsch (1998) there were approximately 150,000 methadone maintenance programmes operating in the U.S in 1997. In Ireland, as of June 2003 there were 6,667 people registered on the Central Treatment List out of approximately 15,000 opiate users in Ireland, (as estimated by Kelly, Caravahlo and Teljeur (2003) in a report submitted to the National Advisory Committee on Drugs). This constitutes over 44% of that population. The fact that methadone maintenance is widely used in Europe and Ireland as a form of treatment for opiate misuse clearly attests to benefits and effectiveness. The following section will outline these in more detail.

The efficacy and benefits of methadone maintenance treatment

Methadone maintenance treatment first came to prominence through the work of Dole and Nsywander in the United States in the 1960s. Dr. Vincent Dole was a metabolic disease specialist, while Dr. Marie Nyswander had worked as a psychotherapist in abstinence based drug treatment programmes for many years. She had become increasingly frustrated with patients, who, fed up with the grind of addiction would go through withdrawal, cooperate with a treatment programme and do well in it for a while, but then relapse. The relapse rate at Lexinton Hospital, the federal treatment facility where Nyswander worked, was approximately 90%.

In the mid 1960s, she and Dole began a series of clinical trials and in 1965 produced data on 22 male patients who had been treated with methadone from which they built a case for legal maintenance of opiate addicts on a daily dose of between 80 to 120 mgs of methadone. They had found that patients thus stabilized were metabolically blockaded and consequently could not experience euphoria by injecting heroin. They had no withdrawal symptoms and did not have to inject street drugs, or get involved in criminal behaviour to support their habit. It generally appeared to be a way out of a criminal subculture and a way into a stable and productive life.

Since then methadone maintenance has been extensively researched and shown to have many benefits. Perhaps the most important of these has been that it has kept numerous people alive who may have otherwise died. Tober and Strang (2003) have also identified four positive roles in relation to methadone maintenance treatment. These are: (1) to relieve withdrawal symptoms, (2) to draw people into treatment, (3) to retain them in treatment and (4) to promote positive change while they are there.

Perhaps the largest and most significant study, which attests to the benefits of methadone, is the National Treatment Outcome Research Study (NTORS), which was conducted by Gossop et al. in England between 1995 and 1997 with a group of 1,000 people who entered drug misuse treatment services. The primary focus of this study was to see whether interventions such as methadone maintenance had any impact on the psychological social and behavioural problems of the clients at one year and two year intervals after entering treatment. There were numerous outcome measures in this study including: rates of reduction in the consumption of street drugs, changes in drug-taking behaviour from injecting to oral consumption, reduction in the
frequency of injecting, improvement in physical, psychological health, reduction in needle sharing, reduction in sexual risk-taking, reduction in criminal activity, improvement in relationships and improvement in home stability. The findings from this study showed that at the end of the first year clients treated in maintenance programmes showed reductions in the frequency of their drug use by nearly half. The proportion of clients injecting also decreased significantly, thereby also reducing the risk of mortality and health problems associated with intravenous use. In addition to this, the rates of sharing needles with its potential to spread infections such as hepatitis and HIV among clients also fell. With regard to psychological health, there was also an improvement. At the beginning of the study, one-fifth (20%) of the clients reported having suicidal thoughts. After one year on methadone maintenance treatment, this number had fallen to 17%. Reduction in the rates of acquisitive crime among the participants at one year were also recorded. Shoplifting and burglary fell by 70%, robbery by 45% and fraud by 80%. These changes were by and large sustained throughout the second year of treatment.

March (1998) also produced empirical research findings from eleven studies investigating the effect of methadone maintenance on illicit opiate use and from eight and twenty-four studies investigating its effect on HIV risk behaviours and criminal activities respectively. The findings of this analysis showed that there was a consistent statistically significant relationship between methadone maintenance treatment and the reduction of illicit opiate use, HIV risk behaviours and drug and property related criminal behaviours. The effectiveness of methadone maintenance treatment was most apparent in its ability to reduce drug related criminal behaviours though appeared to have only small to moderate effect in reducing HIV risk behaviours. While the evidence of success of methadone maintenance treatment has been substantial, there has nonetheless been significant opposition to such forms of treatment, which will detailed in the following section.

Opposition to methadone maintenance treatment
Historically, the opposition to methadone maintenance treatment would appear to have come from a moral perspective rather than a rational one. In 1953, Harry Anslinger, the then Commissioner of Narcotics, warned that treatment clinics ‘dispensing narcotic drugs to drug addicts for the purpose of maintaining addiction’, would ‘elevate a most despicable trade … to … a time honoured profession; and drug addicts would multiply unrestrained, to the irrevocable impairment of the moral fibre and physical welfare of the American people’ (as quoted in Davenport-Hines, p290.). Thomas Szasz (1987) observed that illicit drugs had replaced sex at the centre of, ‘the grand morality play of existence.’ He went on to say that, ‘no longer are men, women and children tempted, corrupted and ruined by the irresistible pleasures of sex, instead they are tempted, corrupted and ruined by the irresistibly sweet pleasures of drugs’ (pp 327-328). Implicit in the above statement is the view that drugs are exclusively evil and that a person using or misusing them is in some way deviant, pathological, and consequently undeserving of compassion or positive regard.

MacGreil (1995) in a study of prejudice and tolerance in Ireland found that of fifty-nine social groups that respondents were asked to rate, using the Bogardus social distance scale, drug
addicts were deemed to be the most socially undesirable. Bryan et. al (2000) in their study also reported attitudes to drug users as being largely negative. They found that two thirds of their respondents believed that support for drug users should only be offered to those who had abstinence as their ultimate goal. Other criticisms of methadone are that it has become an end in itself, (Szasz 1975) that it shouldn't be regarded as any thing other than an adjunct to treatment, (O’Connor 1993), that it can cause tooth decay, constipation and lead to accidental overdose (Preston, 1996) and that it encourages a sense of powerlessness and helplessness in the addict (Bottomley 2003). There is also the argument referred to by Tober and Strang (2003) that methadone maintenance, because it is so effective in removing or reducing many of the adverse consequences of opiate addiction, may in fact remove the incentive to give up using opiates.

Underlying a lot of the opposition to methadone maintenance is the assumption that abstinence and a drug free lifestyle is the only acceptable treatment goal for opiate dependency.

Total abstinence is essential as the first step to tackling life problems and gaining healthier lifelong recovery.

(Coolmine Therapeutic Community, undated)

However, it is clear from the high failure rate of abstinence oriented programmes, (the original source of frustration for Nyswander) and the mortality rates associated with chronic opiate dependence, (English et al. 1995) that there is no compelling reason for insisting that abstinence is the only acceptable treatment goal for people who are opiate dependent. Research findings show that the proportion of people who become and remain abstinent is approximately 10% within the first year after treatment and that approximately 2% per annum achieve abstinence thereafter, (Goldstein and Herrera, 1995; Hser et al. 1993; Joe and Simpson, 1990; Vaillant, 1973). The less extensive literature on the longer-term outcomes of treatment also indicated that over five years and longer, the proportion of opiate dependent people who achieve lasting abstinence from all opiates does not differ between those receiving drug free treatment and methadone maintenance treatment (Maddux and Desmond, 1992).

Alternatives to methadone maintenance treatment

Due to the positive outcomes associated with methadone maintenance treatment, opposition to it has gradually lessened, with some support for methadone-based programmes now coming from proponents of abstinence-oriented programmes in Ireland. Stephen Rowen, (Director of the Rutland Centre in Dublin) in an article in the ‘Irish Times’ newspaper (Rowen, 2003), conceded that, ‘methadone maintenance could be used in the early stages of recovery for chronic drug users’. However, he went on to say that ultimately a recovery path needed to be established for an addict rather than viewing methadone maintenance as, ‘an end in itself.’ He argued that once an addict showed a willingness to progress beyond methadone, then he/she should be given whatever resources he/she needed. A distinction nevertheless, should be made between methadone maintenance treatment and methadone reduction treatment. Whereas the former involves the provision of methadone in stable doses and is intended to reduce problematic
behaviours associated with illicit drug use, it is not in itself an abstinence-oriented treatment and involves continuing use of methadone possibly on a long term and permanent basis. The latter on the other hand is a short to medium abstinence-oriented intervention varying from a few weeks in duration to many months and occasionally years. Reduction schedules may be fixed without the patient being involved in the discussion of the duration of the treatment or the rate of reduction. However, it may be negotiable, with the patient having some say in the timing and the amount of dose reductions.

When one compares the two treatments, clearly methadone reduction appears to be the more attractive option because it offers the ‘prize’ of abstinence, whereas maintenance treatment could be perceived as consigning the patient to a life of chemical dependence, albeit legal chemical dependence. However, in the two year follow-up studies of the NTORS client group, (Gossop et al. 2001) differences were found between those on methadone maintenance and those on methadone reduction treatment with regard to prescribed doses and retention rates (Gossop et. Al 2001). Patients on higher doses tended to achieve better outcomes and there were lower retention rates among patients on methadone reduction treatment. Treatment retention has been found to be one of the most consistent predictors of favourable treatment outcomes (Simpson et al. 1997; McLellan et al. 1997). This was consistent with the results of a study carried out by Sees et al. (2000) who found that patients receiving 180-day detoxification were less likely to remain in treatment than patients receiving maintenance. In fact, the more rapidly the methadone was reduced, the worse the outcomes.

The NTORS findings raise questions about the overall effectiveness of methadone reduction treatment. Tober and Strang (2003) in fact suggest that many patients who start out on a methadone reduction programme actually end up on a maintenance programme because of the failure of the former to produce positive outcomes. Extrapolating from the findings of the NTORS, the best outcomes are found among those being maintained on regular high doses of methadone for protracted period of time or indeed permanently.

**Conclusion**

Methadone maintenance treatment is successful in retaining opiate dependent people in treatment and providing a range of positive outcomes with regard to the person’s actual drug use, their physical and psychological health and their social functioning. From the research of Gossop et al. (1998, 2000 and 2001), it would appear that the main contributory factors to the maximisation of these outcomes are the size of the dose and the length of time in treatment. However, keeping drug addicts on high doses of drugs for indefinite periods in order to keep them stable is one, that attracts controversy, and some concerns have been expressed about the physical long-term effects of methadone. This perhaps explains why within Irish society there appears be significant ambivalence about such treatment. In one sense, there are constant demands by communities and the media to, ‘do something about the drug problem.’ Nevertheless, when a proven treatment like methadone maintenance is offered, there can be similar levels of opposition (Farrell et al., 2000) to the siting of methadone treatment clinics in local areas. The range
of views evident in the general population can also be reflected in those of public representatives, political parties and policy makers.

There is also an argument that methadone is purely a pharmacological treatment which serves to act as a form of social control of a highly problematic and otherwise difficult to manage group. Nevertheless, no other as effective, evidence based ‘non-pharmacological’ alternative has been devised or offered. The prohibitionist, ‘war on drugs’ approach to drug misuse has clearly had at best limited success in terms of its own objective of eliminating drug misuse, as can be seen from continuing escalation in drug use worldwide. Similarly, it can be argued that there was a distinct failure in Ireland to cope with the heroin epidemic and the emergence of blood-borne diseases in the 1980s, until harm reduction approaches were used. The principle of harm reduction, which appears to influence Irish drug policy increasingly, particularly in urban centres, has provided the philosophical bedrock for methadone maintenance treatment to take root. In recent times, the notion of injecting rooms has also been mooted, though immediately opposed on the same grounds as methadone maintenance i.e. that providing such a service is in some way condoning drug use. While this remains the case, potentially effective responses to drug addiction will of necessity continue to be formulated and developed behind closed doors, away from public scrutiny.

In conclusion, therefore, methadone maintenance treatment is by no means a perfect treatment response to opiate addiction, in the sense that it guarantees a drug free lifestyle. In addition, the increasing prevalence of cocaine in Irish society, with its associated problems, has thrown up new challenges for drug treatment services as it is not amenable to a pharmacological response and perhaps exposes the fact that services to date may have become over dependent on such responses. Nonetheless, methadone has clearly been shown to be effective and pragmatic in retaining opiate addicted people within the treatment milieu and in contributing to the reduction in the physical, psychological and social harm resulting from such drug misuse. The task for policy makers and service delivers however, is not solely to convince people of its efficacy or benefits but more importantly to challenge the moral arguments about drug misuse which have continually impeded the development of a clear response to opiate addiction based on the principles of harm reduction.

References


Butler, S. (2002) Alcohol, Drugs and Health Promotion in Modern Ireland. Dublin:
Institute of Public Administration.


prevalence of Opiate Use in Ireland 2001 to 2002. Small Area Health Research Unit, Department of Community Health and General Practice, Trinity College, Dublin.


Tony Carlin is a Senior Probation & Welfare Officer leading a PWS Youth Justice team in Dublin.

Email: apcarlin@pws.gov.ie