

Methadone, Prisons and AIDS

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This paper does not pretend to be an academic dissertation on the intricacies of a methadone program, nor is it intended to be a definitive statement of what should or should not obtain in a methadone program. It certainly does not presume to be a model for other jurisdictions, as it addresses particular problems found in New South Wales, related to the specifics of the prison population there.

It is thus a narrative account of the development of a large and complicated program in New South Wales prisons, leaving out some of the politics, all of the personalities and most of the mistakes.

The Drug

Methadone is a synthetic opioid, that is, a manufactured drug which mimics in its properties drugs obtained naturally from the opium poppy, such as heroin and morphine.

Methadone was produced by German chemists about the time of World War II for use by the troops in the field. For this purpose, it had the advantages of being a strong analgesic, effective when taken by mouth and also having a relatively long duration of effect.

Methadone is a strongly addictive drug, and if withdrawn suddenly, causes more severe withdrawal symptoms than heroin. It is said by some that the withdrawal effects of stopping methadone do not occur in the first three to four days, but this is not in keeping with experience in gaols. Our clients complain of discomfort as soon as they realise that their next dose may be late or not arrive at all. Of course, it could be argued that this is more psychological than physical.

The use of methadone in the treatment of heroin addicts followed on from the work of Dole and Nyswander (1965) in the USA. These researchers, in the late 1960s/early 1970s, published what, in retrospect, were overly optimistic assessments of the benefits of methadone to the addict.

There are two main concepts central to methadone treatment, and which attract addicts to the various programs:

- the desired effects of heroin - the so-called 'rush' or 'flash' plus the following 'high' or sense of euphoria and well-being - are negated by methadone treatment. Addicts say that the cost of getting enough heroin to 'get over' the blocking effect of methadone is not worth the effort; and
- the dreaded feeling of 'hanging out' or 'narcotic hunger' is made tolerable by methadone. The chemical aspect of this phenomenon is controlled, but not the

social/psychological drive which, arguably, was the initiating factor in the development of the addictive personality. In essence, methadone makes it easier for the addict to say 'no' to heroin.

The actual cost of the drug itself is born by the Commonwealth while other costs are either directly funded by the State, or indirectly by the Commonwealth through the National Campaign Against Drug Abuse.

In New South Wales, methadone can only be prescribed for known addicts by approved prescribers who, in addition, must apply for specific approval on behalf of each 'new' addict they wish to commence on treatment.

Since few, if any, of our clients are chemically addicted to heroin when commencing gaol methadone, their tolerance is low and doses and rates of increase must be slow. The usual regime is to commence on 20 mg daily as one oral dose, and increase 5 mg every third day till 60 mg is reached. After four weeks on this dose, if the inmate believes that he/she needs more, a blood test determines the level of methadone remaining just prior to the next dose. If the level is below a certain cut-off point, the dose is increased.

The usual dose range for the prison program is between 60 and 80 mg daily. While there are people on higher doses, this is usually due to increased tolerance determined by the blood levels as above, or due to the prescribing pattern of the person's outside doctor.

There are certain conditions where the metabolism of methadone is increased. Thyrotoxicosis (an overactive thyroid gland) is one and although not common amongst prisoners, has occurred. Also, certain types of medication, for example anti-epileptic treatment, can lead to a more rapid turnover of methadone. Both these situations require a dose increase to maintain the client at a comfortable level.

There are many myths surrounding methadone, for example:

People on methadone have a higher pain threshold because of its powerful analgesic properties

The analgesic effect of all narcotics diminishes with continued use producing a need for increasingly higher doses in order to maintain the desired effect. This is best seen in some terminally ill patients who display an increasing tolerance to the effects of narcotics.

The importance of this is that methadone recipients require analgesia additional to their methadone, for example, when undergoing surgery or after major trauma. Some junior and inexperienced doctors have been known to restrict the necessary medication because the patient was on methadone.

People go on methadone to get 'stoned'

The sedative effect of methadone generally wears off as the addict becomes stabilised on the drug. Dose regardless, a stable methadone client can drive a truck or heavy machinery, perform other complex physical and intellectual functions and, indeed, has a reaction time on testing at least as good as non-addicted persons.

A person on methadone can be identified because they are 'high' or look intoxicated

As already stated, a person stabilised on a dose of methadone looks, sounds and acts normal. Any stable methadone client who appears 'stoned' has been dabbling with something else.

Unwanted Side Effects

Taking methadone requires a certain degree of commitment. The taste is vile, even in the syrup form presently used. Many people cannot tolerate it at all, and vomit immediately after dosing.

Nausea and vomiting, however, are also due to a central as opposed to local effect, as is loss of appetite. Some recipients lose considerable weight, while others, paradoxically, gain weight. Severe constipation is universal and, of course, not amenable in New South Wales to the usual advice concerning fresh fruit in the diet due to local policies.

There is a varying degree of sedation on commencement of treatment which always comes as a surprise to our clients who wrongly presume they will have retained some of their old narcotic tolerance.

The biggest danger in the use of methadone is of overdosing leading to respiratory arrest and death. The risk is increased remarkably by the use of other forms of sedatives, particularly the benzodiazepine group (see below).

By itself, in the non-addicted person, methadone is a strong respiratory depressant, and can be fatal. Due to its long action, reversing this depressant effect takes quite a long time, the actual length of which is dose-dependent. Some three years ago, a number of female prisoners broke into the medical clinic at Mulawa Prison and locked themselves in the drug room, having forcibly taken the keys away from one of the nurses. They then proceeded to distribute 200 mL bottles of methadone to their colleagues through the pill window. These bottles contain 1 000 mg of methadone. The usual dose range is between 40 and 160 mg. By the end of the day, six women had had respiratory arrests, all in different security areas of the gaol. While no one died, mainly due to the quick and effective responses of staff, officers and inmates, some were still going in and out of respiratory arrest in the nearby referral hospital twenty-four hours later, in spite of treatment.

Methadone in Overseas Gaols

As far as can be determined, there is precious little in the way of overseas experience on which to rely for assistance in managing a gaol-based methadone program. Needless to say, those who are anti-methadone have no hesitation in using this fact to question the present policy in New South Wales.

While not having had the benefit of seeing first-hand, the systems of other countries, I am led to believe by reading and discussion with others that the systems are simply not comparable. Custodial practices and policies overseas do not seem to equate with those in New South Wales. Cell sharing, the amount of time spent in common areas with other inmates, contact visits, lack of invasive body search techniques and the sheer number of people passing through the gaols all preclude a successful program to control the entry into, and sharing of drugs, in gaols.

A Brief History of Methadone and Gaols in New South Wales

Methadone slowly insinuated itself into gaols, developing as 'the best game in town' to prevent needle sharing in the prison setting. Up to the time that its possible advantage was realised, methadone was rather a nuisance. Added paperwork along with the incessant manoeuvring of prisoners to get either on the program or have their dose increased was an absolute disincentive to its expansion.

Initially, my predecessor, Dr John Ward, obtained approval for a limited program to examine the effects of the program on recidivism. Before that aspect got under way, however, he moved out, and I moved in, soon to be followed by the rapidly increasing recognition of the AIDS epidemic.

However, 'the system' was not enthusiastic about methadone being prescribed in gaols. The AIDS threat in gaols through needle sharing had not yet been recognised as a potential source of spread of the infection into the general community. All that was approved was an

expanded version of Dr Ward's idea, for pre-release (three-months-to-go) prisoners. This was too limited to be effective in reducing recidivism, and created tension as prisoners queued up for the limited number of places on the program.

Spurred along by AIDS, overseas opinions and the difficulty of keeping New South Wales prisons drug-free, the program was eventually funded by the Commonwealth, through the New South Wales Directorate of the Drug Offensive (DODO).

Corrective services staff were responsible for the assessment and counselling of methadone clients, while Prison Medical Service (PMS) personnel prescribed and dispensed the drug. This separation of functions, along with difficulties about finances, caused trouble.

Crossed organisational charts do not work. The system that was used initially revolved around the Department of Corrective Services being funded by DODO, and then reimbursing PMS for its 'costs'. Corrective services and PMS never did come to agree on what was a fair and just division of the cake. Eventually, after increasing problems, both financial and philosophical, the earlier arrangement was disbanded and the present system introduced on 1 July 1990. Now, PMS is directly funded by DODO to run the program independently of corrective services.

The Community Methadone Program in New South Wales

Methadone came into use in New South Wales in the late 1960s, and was initially very limited in its availability. There was a great deal of competition for the limited number of methadone places on the even fewer programs. Originally, it was given in orange juice, in an abortive attempt to hide the vile taste. Later, a syrup was used, but the taste is still most unpleasant; often those commencing on the program experience nausea and vomiting after ingestion.

There were relatively few places in the total program until about five years ago, when, due largely to the AIDS epidemic, there was a change in attitude towards methadone. By Government policy, an increase in accessibility through an increase in available positions, occurred. There was also a decision to expand the role played by private prescribers. The net effect is that now there are approximately 5000 persons on methadone in the State. Approximately 400 of these are in full-time custody at any one time.

Treatment Models

Methadone is one of a range of treatment options in the management of narcotic drug addiction

This idea was the basis of the early methadone programs. There are still some who adhere strongly to the model, to the exclusion of all others and thus have difficulty in adapting to the increasingly popular 'harm reduction' school of thought. This line of thinking tends to discount the effect of AIDS.

Those who subscribe strictly to this view have in the past, tended to make entry to a methadone program very selective and difficult. They often run their programs in what is seen by some to be an overly paternalistic and authoritarian manner. It was common practice, for example, to exclude poly-drug abusers from these programs.

Difficult entry into a methadone program, by dint of strict and inflexible assessment criteria gives program personnel a high level of personal power over the powerless addict. This in itself is a handicap to effective intervention for persons already lacking in self-esteem.

Methadone is a treatment for drug addiction and a cure is the accepted end point of treatment

There is a tendency for those who see methadone as a 'treatment' to expect, by implication a 'cure'. This can make it difficult working with a client population with such a high failure rate, and can lead to what others see as inappropriate dismissals from the program.

Similarly, it has been shown that the length of methadone treatment is best determined by the addict rather than the therapist. There is a significantly higher failure rate amongst those who are taken off, as opposed to take themselves off, treatment.

Methadone is part of a no-frills harm (AIDS) reduction program

This treatment model is at one end of the philosophical spectrum. Entry is relatively easy and the eligibility criteria more flexible. Basically, this type of program is available to any addict who uses intravenous narcotics and who wishes to join the program. Those who use heroin as only their second choice drug would not automatically be excluded. The development of 'no-frills' programs was largely precipitated by the AIDS epidemic, adopting the philosophy of reducing the need for needle sharing by the use of methadone.

These programs are of the 'dose and go' type with minimal restrictions, and counselling available only on request by the client. The length of treatment is open-ended so long as the client is exposed to significant risk of harm, wishes to continue and is shown to be benefiting from continued treatment. By reducing the risk of harm to the patient, there is a reduced risk to the community as a whole. This style of approach seems to be more common in private sector programs.

Methadone is a drug treatment option with an anti-AIDS additional benefit

This is probably the model with the widest acceptance by those in the field. There is still ease of access to the program, but staff/client interaction is encouraged, and there is greater availability of counselling. There is usually a stricter regime applied when compared to the 'no frills' school, but not anywhere near that which was the norm in the past.

In New South Wales, at present, our program more closely approaches the 'no frills' model. We are aiming to improve this, and expect to do so in the foreseeable future. Lack of suitable funding and appropriate staff have been the impediment, but this is now being resolved. However, it is important to state clearly that in New South Wales prisons, methadone programs are supported mainly as an anti-AIDS strategy.

The Impact of AIDS

Five years ago, methadone was only an organisational irritant to the Prison Medical Service, requiring additional paper work and extra nursing input. About that time, AIDS raised its head, and testing for the related antibody became available. The situation is now remarkably changed, with methadone being the 'tail that wags the PMS dog.'

This unfortunate situation has arisen not only because of AIDS, but also because of controls and limitations placed on the program by security requirements demanded by others. Some of this is also based on intransigent ignorance about methadone, its pharmacology and its purpose and place in the overall anti-AIDS armamentarium. On the other hand, some of it is based on the reality of prisons and prisoner behaviour.

The main reason PMS promotes methadone in New South Wales is as an AIDS prevention strategy whereby it is hoped that needle sharing will be limited. However, it is acknowledged that for some individuals, methadone is a major help in overcoming addictive behaviour. My own view is that it is more effective in attaining this goal in the over thirty age group and less so in younger recipients. Having said that, I would add that if needle sharing in New South Wales goals was not a problem, then support for methadone would be markedly reduced. It is very time consuming and expensive in terms of staffing and administration.

The Practicalities of a Methadone Program in a Gaol Setting

In general terms, dispensing methadone involves the following for each inmate on the program:

- A prisoner applies to go on the program.
- He/she is assessed for suitability according to criteria laid down in both national and State guidelines. These are slightly modified for use in prisons. The assessment usually is done by specific people paid out of methadone funding, or by one of the authorised prescribers (medical officers) associated with the PMS. The prisoner is asked to sign a methadone contract which, among other things, involves obligations to refrain from using illicit drugs and from abusing staff as well as submitting to urine testing as and when required by staff. The contract also makes it clear that the inmate may be involuntarily withdrawn from treatment for repeated breaches of the contract.
- An authorised prescriber interviews the applicant prisoner and, if in agreement with the recommendation of the assessor, completes and signs the 'Application to Prescribe Methadone' form and writes up the Treatment Sheet.
- The application form is faxed to the Health Department for approval prior to treatment actually commencing. Approval is usually obtained within twenty-four hours, and treatment commences.
- The prisoner attends at a given time and is 'patted down' by a prison officer for hidden containers etc. A registered nurse, meanwhile, draws up the appropriate dose of methadone, checks it with a colleague and makes the necessary entries in the drug register. The inmate produces his/her ID and the dose is then handed to him/her in a standard sized plastic container. The container is then filled with water, to make diversion by retention in the mouth or regurgitation more difficult, and taken in front of the nursing staff.
- At least once a week, a supervised urine specimen is collected from the inmate, temperature-tested electronically to ensure that it is a specimen freshly passed, and sent off for drug screening. The results are confidential and not available to the Department of Corrective Services.
- The prisoner then joins the others already dosed and waits under custodial supervision for fifteen minutes in a holding yard before being permitted to return to normal discipline. This procedure again is designed to reduce diversion.
- Any inmate can request an increase in dose, but must have a methadone blood level test performed before any alteration is possible. This enables some degree of objectivity to be introduced into the vexed question of dosage level. Similarly, any inmate can request to come off methadone at a rate dictated by the recipient to best address their needs and comfort.

The Benefits

There is anecdotal and research based evidence that methadone in New South Wales prisons has a beneficial effect on intravenous drug use by inmates. While the best indication is found in the small number of so-called 'dirty urines' found to be contaminated with non-prescribed drugs, it is not suggested that all the urine specimens tested come from the person who supplies them. There is here, as in other areas in prisons, a never-ending game whereby the inmate attempts to beat the system, and the system attempts to stay one step behind.

The largest problem is the concomitant use of drugs from the benzodiazepine group. Serepax, rohypnol, valium and mogadon are examples. This group of drugs has an additive effect on methadone and can lead to intoxication or, worse, unconsciousness, respiratory arrest and death.

A quandary arises when a person is avoiding intravenous drugs, but continually putting their health at risk by potentially overdosing on a combination of methadone and one of the benzodiazepine group. The primary, that is, anti-AIDS goal has been met, but at what potential cost?

As a rule of thumb, and in the absence of a major breach, such as threatened assault on staff or drug-induced unconsciousness through overdosage on a combination of drugs, inmates are involuntarily taken off the program if they accumulate three breaches against the agreement over a three-month period. If this occurs, they are detoxified comfortably, and may apply to re-join the program after three months 'in the wilderness'.

Another welcome outcome of methadone treatment derives from its use in heroin-addicted, pregnant women. Methadone, alters the lifestyle of the pregnant woman by eliminating the need to 'hassle' for drugs, at least during her pregnancy, and has a significant beneficial effect on the outcome of the pregnancy. There is a reduction in premature labour and stillbirths and, by stabilising the activities of the mother, the bonding between the woman and her child is enhanced.

The Costs

In money terms, the methadone prison program cost the New South Wales Government approximately \$560 000 in 1989-90. Because of the difficulties in moving inmates through clinics and performing all the bureaucratic and security steps required, it is estimated that for each dose of methadone administered to an inmate, there are ten minutes of staff time required. By calculating this out, and allowing for holidays etc, it works out that 14.5 full-time equivalents of nursing staff are needed. Without including on-costs, the cost is approximately \$500 000. When this figure is added to clerical and prescriber costs a figure of \$560 000 is easily attained.

There are also opportunity costs involved in that the time taken up by methadone limits that available for other nursing and medical duties. This, in fact, has been a problem for some of the nursing staff who see the methadone program as an increasing distraction from caring for the majority of prisoners. The methadone program in a busy gaol will dose fifty prisoners daily, and effectively block the clinic to other inmates for up to two hours. There is also a cost in terms of the additional prison officers required for the security aspects of the program. This leads to problems for corrective services who see the need for the program as marginal at best, but the costs as real and significant. Here, health and custodial priorities come yet again into conflict.

The Opponents

There has never been a great deal of support from corrective services for the methadone program in gaols. Many prison officers only see it as 'another drug' or 'a crutch' and do not, or will not, regard it as a public health program. Certainly, there have been some notable exceptions, where senior corrective services officers have seen and acknowledged the benefits for some individuals who no longer have to 'hassle' for drugs in gaol. However, the majority of corrective services staff would rather not have anything to do with methadone.

Admittedly, as already noted, the methadone program causes a great deal of trouble, relative to the number of prisoners presently on it. While this is due in part to prisoners diverting the drug either because of 'standovers' or for re-sale, it is in part due to security measures imposed through or by the Department of Corrective Services itself. Of course, there are the usual practices required by the Health Department relating to restricted drugs, which also take up more time in a gaol than elsewhere and these all compound the problems for prison administrators.

The Proponents

In the health field, the attitude is very different. The methadone program is supported by most if not all of the luminaries in the AIDS field, although it was slower to gain the acceptance of drug and alcohol experts. I believe this was because it was harder for the latter to let go of the view that methadone was a form of therapy for drug addiction per se, and accept a position where the emphasis was altered to making the anti-AIDS thrust the dominant motivating factor, especially in gaols.

Other AIDS-related Strategies

Methadone is not the only program aimed at reducing the spread of HIV. Other initiatives are:

Milton tablets

With the necessary political approval, Milton tablets, a form of concentrated bleach, are distributed in gaols for disinfection of syringes. While this was not welcomed into prisons, it is there, and it is working. Most inmates who either cannot get onto, or elect not to try, the methadone program, are aware of, and have access through prison clinics to, Milton tablets. Of course, as part of the game, those on the program have discovered that by introducing Milton into their urine by urinating over their fingers with traces of the tablet under their fingernails, they will totally destroy the ability of the test to determine the presence of any illicit substance.

Condoms

Condoms remain a vexed issue. There are industrial and 'moral' impediments to their introduction. Some \$47 000 worth of condoms previously held by the Prison Medical Service have long since been distributed through community health clinics to sexually active people attending those service centres. It would have been a shame to see them all perish while negotiations continued about their distribution.

Compulsory testing

Compulsory testing for HIV status is soon to commence in New South Wales. It will be applied to all those being received into prisons, and to those being discharged, as long as more than three months have elapsed since their last test. Others may also be directed to be tested at the discretion of senior prison officers.

While there are arguments both for and against this government decision generally, I believe that most medical practitioners working in the area are in favour of testing. For the first time, there will be an objective measure of what is actually going on. It may not be the perfect instrument, but it is the best to hand. As a result, it is hoped that rational planning and funding decisions will be made as, with the passage of time, a clearer picture is obtained of what until now has been at best, only educated conjecture.

Also of interest is the strong feeling that the majority of prisoners do not have real objections to compulsory testing. With the absolute absence of physical compulsion, the general opinion is that cooperation will be the norm.

Education

While held by authorities to be the mainstay of all anti-AIDS strategies, in the prison setting it is difficult to feel enthusiastic about the success of education programs as they effect the behaviour of inmates, or the attitudes of prison officers.

The recent sad event in New South Wales where it is alleged that a prison officer was assaulted with a needle and seroconverted did little to advance things. The 'what if' syndrome is alive and well in New South Wales amongst prison officers. The argument is that, although no-one has contracted the virus through being, spat on, for example, 'you can't prove that it couldn't occur'.

As for the intravenous drug users amongst prisoners, they still share needles, but admit to concerns about becoming HIV positive. How real these concerns are in altering their behaviour is dubious. As a group they remain impulsive and retain the 'it won't happen to me' philosophy that kills so many young people on the road.

Certainly, the theoretical knowledge base of both officers and inmates has been expanded, largely by the educational efforts of the Department of Corrective Services. It is a moot point how this knowledge translates into altered attitudes when incidents such as minor assaults and spitting, occur.

Conclusion

Other speakers, no doubt, will address American and European statistics of the AIDS epidemic in gaols. Information about deaths, the number of antibody positive persons being received into gaols and the prevalence of HIV positive status amongst inmates and the population generally are all relevant, available and disturbingly high.

Australia, on the other hand, has some limited right to optimism in its approach to AIDS. The earlier gloomy predictions about the rate of spread amongst intravenous drug users is well over the actual rate being measured, and to some extent, this must have an effect on the rate of HIV spread to the heterosexual community.

Our knowledge of HIV prevalence within the New South Wales prison community will be significantly advanced with the introduction of compulsory HIV testing later this year. Thus, for the first time, there will be the beginnings of a measurement system which will give an overview not only of HIV prevalence, but also over time, the rate of seroconversion in prison. It is in this area that methadone, if as effective as hoped and thought, will come into its own.

If methadone as a treatment modality cannot be shown to be effective in reducing the expected seroconversion rate amongst prisoners, then its very use in gaols must be questioned. There will be statistical difficulties in assessing the success or otherwise of the program. Until they are identified and addressed, the program must continue.

Reference

Dole, V.P. & Nyswander, M.E. 1965, 'A medical treatment for diacetylmorphine (heroin) addiction: A clinical trial with methadone hydrochloride', *Journal American Medical Association*, vol. 193, pp. 646-50.