



Research Publication

Monitoring the NSW Prison Methadone Program: A Review of Research 1986 - 1991

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SUMMARY

Staff of the Research and Statistics Division were involved in monitoring the NSW Prison Methadone Program from mid-1986 until the end of 1991. The purpose of this paper is to summarise the results of the eleven studies conducted during this period.

The Pilot Pre-release Methadone Program, a joint program of the NSW Department of Corrective Services and Department of Health, commenced in April 1986. Following increased NCADA funding in the 1987/88 Budget, the program was expanded such that the pre-release program became just one part of a larger Prison Methadone Program. The expanded program encompassed prisoners on methadone at the time of incarceration, long-term prisoners, and prisoners who were Human Immunodeficiency Virus (HIV) positive or Hepatitis B virus positive, as well as pre-release prisoners.

Initially the program focussed on 'breaking the cycle of criminal activity associated with drug use'. However, with the growing concern about the incidence of HIV, the rationale of methadone maintenance has moved towards being an AIDS prevention strategy.

The purpose of this paper is to bring together and summarise the results of eleven studies which were conducted to examine different aspects of, initially, the Pilot Pre-release Methadone Program and, subsequently, the Prison Methadone Program.

Selected findings are presented below.

- Inmates' expectations indicated an adequate knowledge of the possible medical side effects of methadone.
- Inmates seemed clear as to the procedures, conditions and consequences of urine analysis and accepted urine analysis as a necessary part of the methadone program.
- There was no evidence to suggest there was a blackmarket in the supply of methadone within the gaol.
- Analysis of urine samples revealed that the majority of the specimens (90%) showed no evidence of non-prescribed drug use by inmates on the Prison Methadone Program.
- Approximately 1% of urine specimens, pertaining to 12% of the inmates tested, showed either morphine or amphetamines, the drugs most likely to be used intravenously.
- Of the 223 prisoners who had been released on the Prison Methadone Program as at 30th June 1988:

33.6% were continuously on community methadone programs since their release and up to 31st July 1988;

SUMMARY - CONTINUED

34.5% stopped treatment either of their own accord or involuntarily;

31.8% stopped community treatment due to incarceration.

Of those who stopped community methadone treatment either voluntarily or involuntarily, the majority (79.3%) did so within six months of release.

- Typically inmates reported that the methadone program had led to benefits for them. They responded that they had stopped hustling for, using and thinking about heroin, felt less aggressive and felt that going on the methadone program had made their time in gaol easier.
 - Of those reincarcerated following release on the methadone program, 87% stated that methadone helped them reduce or stop using heroin. Three-quarters (77%) stated that methadone helped decrease the number of crimes they committed, usually because it reduced or eliminated their need to finance a heroin habit.
 - On most of the measures of reoffending used, those on the methadone program did not perform significantly differently from those in the comparison group.
- Although 28% of inmates interviewed believed that stopping the spread of AIDS should be a salient objective of methadone, 74% stated that they thought there were more effective ways than methadone to stop to spread of HIV in gaol.
 - Several major problems were identified with the operation of the program by staff interviewed including:
 - lack of understanding or knowledge of the aims and objectives of the program among all categories of staff involved in the program;
 - lack of counselling for inmates and confusion as to who is responsible for counselling;
 - inadequate and/or inappropriate assessments;
 - inadequate resources both in terms of staffing and dispensing facilities;
 - perception that inmates were going on to methadone to secure early release or parole;
 - lack of formal and continuing communication between all parties concerned;
 - problems with "holding period" and escorts.

INTRODUCTION

1. Methadone

Methadone is a synthetic opioid, used under medical supervision for treating opiate addicts. There is no one standard methadone program. Methadone programs can differ in terms of:

- the intended duration of treatment (e.g., short-term detoxification; intermediate term maintenance of several months or years; long-term maintenance, possibly for remainder of life);
- dosages;
- degree of support of ancillary services such as counselling and vocational rehabilitation;
- aims and rationales of the program (e.g., harm minimisation, reduction in risk of transmission of viruses such as Human Immunodeficiency Virus (HIV), Hepatitis B or C; a treatment option for opiate addicts; etc.);
- nature of assessment and criteria for inclusion on the program;
- nature of monitoring and review procedures for those who are on the program.

In their review of literature about methadone programs in the community,

Hall, Ward and Mattick (1992) concluded:

"... the available evidence provides good reasons for believing on **average** methadone maintenance is an effective form of treatment for opioid dependence which reduces injecting drug use, criminality, and the risk of contracting HIV"

When discussing the effectiveness of methadone programs in the community Hall et al (1992) provided four major cautions:

- "... even though methadone is effective 'on average' it is not a panacea for opioid dependence ... Even at their best, the effects of methadone are 'poor' when judged by the unrealistic expectation that all patients will achieve enduring abstinence from all opioid drugs...";
- "... there is considerable variability in the effectiveness of methadone programs in reducing drug use and criminal acts";
- "... the most effective methadone programs are those which resemble the model introduced by Dole and Nyswander, namely, those which provide higher doses of methadone in the context of a comprehensive treatment program

with maintenance rather than abstinence as a treatment goal. The efficacy is much less certain for programs which depart from this model by: reducing methadone dose, eliminating ancillary services, imposing abstinence from methadone as a treatment goal, or reducing the demands on methadone patients in the interests of preventing the transmission of HIV";

- "... the benefits of methadone maintenance only continue as long as patients remain in treatment. Patients who discontinue treatment seem to relapse to opioid use at a high rate" (p. 13).

This final caution has particular relevance when considering the potential effectiveness of a methadone program for prisoners, given that other research (Babst, Chambers & Warner, 1971) has indicated that those who had longer conviction records and were not employed at admission were less likely to remain in community methadone programs.

2. NSW Prison Methadone Program

The Pilot Pre-release Methadone Program within the NSW Department of Corrective Services commenced in April 1986, using funding from the National Campaign Against Drug Abuse (NCADA). The program was established

for inmates with a history of opiate addiction.

Prior to the commencement of the Pilot Pre-release Methadone Program, methadone was available to remand prisoners or convicted prisoners with sentences of six months or less who were on methadone when they were received into gaol. Longer-term prisoners, who were on methadone when they entered the prison system, were given reduced dosages and were withdrawn from methadone over a three week period. No prisoners were introduced to methadone while in prison (Bailey, 1985). Prior to the commencement of the Pilot Pre-release Methadone Program, prisoners motivated to use methadone to assist them stop or reduce heroin use on release could not be assessed for a methadone program until after they had been released and recommenced using heroin. However after the released prisoners had returned to their previous habits, their motivation to change their opiate use may have waned.

Entry onto the Pilot Pre-release Methadone Program was voluntary. In short, the admission criteria for the program were that the inmate was at least 18 years of age, had an established history of narcotic addiction and of recidivist drug-related criminal activity and had demonstrated social and motivational factors indicating a willingness to change his/her lifestyle. The inmate had also to be within 12 to 16 weeks of release with a supervised

period after release of at least 6 months and to give permission for the collection of urine specimens. There needed to be an available position in the community-based methadone program and methadone maintenance must be seen as a viable part of the management plan for the inmate.

If assessed as suitable, inmates were stabilised on methadone prior to release. Following release they continued to pick up methadone from one of the three community dispensing units. A total of 150 places was allocated on community methadone maintenance programs for people released from gaol. In the community the clients were under the supervision of the then Probation and Parole Service (subsequently known as the Community Corrections Service). The correctional centres participating in the pilot program were Bathurst X-Wing, Mulawa Training and Detention Centre for Women, Norma Parker Centre and Parramatta Gaol. The first three of these centres held only female inmates and the fourth held both male and female inmates at this time. The community methadone dispensing units were at Blacktown, Liverpool and Rankin Court (Darlinghurst).

Hill (1986) specified six aims for the Pilot Pre-release Methadone Program:

"The goal of methadone use, as with other treatment programs for drug abuse is to contribute towards:

- 2.1. improving levels of social/behavioural functioning;
- 2.2. an option which provides for the 'management' of persons in custody;
- 2.3. the stabilisation of persons on methadone prior to their release; the transition to a community based program and support services;
- 2.4. reducing involvement in criminal activities (including drug purchases and dealing);
- 2.5. limiting the spread of drug use with the ultimate objective of a drug-free lifestyle;
- 2.6. reducing morbidity and mortality" (p.2).

Following increased NCADA funding in the 1987/88 Budget, the program was expanded such that the Pre-release Program became just one part of a larger Prison Methadone Program. The expansion of the program included a number of changes to policy. Positions were available for up to 500 inmates, in a wider variety of gaols. The expanded program encompassed:

- inmates on methadone at the time of incarceration,
- long-term inmates,
- inmates who were Human Immunodeficiency Virus (HIV) or Hepatitis B virus positive, or at risk of infection as a result of needle

sharing, as well as

- pre-release inmates.

It was no longer a requirement that inmates on the program be released under the supervision of the Probation and Parole Service.

Initially the program focussed on 'breaking the cycle of criminal activity associated with drug use'. However, with the growing concern about the incidence of HIV, the philosophy of methadone maintenance in prison has moved towards an AIDS prevention strategy. Baldwin (1987) set out a number of objectives of the expanded program (p. 1). These stated objectives were:

- "- to reduce the incidence of intravenous heroin use by prisoners;
- to reduce the spread of HIV and Hepatitis B virus;
- to continue methadone maintenance treatment of prisoners incarcerated whilst in treatment;
- to commence methadone maintenance treatment with individual prisoners who satisfy the agreed assessment criteria;
- to break the cycle of criminal activity associated with drug use; and
- to provide access to a range of counselling services".

The Methadone Treatment Policy was again updated in August, 1989. The document entitled "Policies and Procedures for the Methadone Treatment of Opioid Dependence in NSW" (Directorate of the Drug Offensive

and NSW Department of Health, August, 1989) outlined the aims and objectives for methadone treatment in NSW, the Prison Methadone Program being a subset of this. At this time the Prison Methadone Program was stated to have five objectives:

- "- to reduce the incidence of intravenous heroin use by prisoners;
- to reduce the spread of Human Immunodeficiency Virus and Hepatitis B virus amongst prisoners;
- to continue the methadone treatment of prisoners who are suitable for this treatment;
- to facilitate prisoners' transfer of methadone treatment from the Prison Methadone Program to community methadone programs" (p. 42).

Hence, when compared to the 1987 objectives, it can be seen that the first three of the 1987 objectives were continued into 1989, while the last two ("to break the cycle of criminal activity associated with drug use" and "to provide access to a range of counselling services") were replaced with a new objective.

The updated policy was written with "a view to using methadone as an important strategy for reducing the spread of Human Immunodeficiency Virus and Hepatitis B virus amongst intravenous opioid users and from them into the community", based on the assumption that needle-sharing is a potential means for the transmission of HIV.

The change in philosophy was emphasised by the incorporation of one major addition to

the acceptance criteria, i.e. provision for the inclusion of inmates with "no extensive history of illicit opioid use prior to incarceration and no evidence of current physical dependence, the sharing of drug injection equipment by the prisoner may be sufficient grounds for initiating methadone treatment" (Directorate of the Drug Offense and NSW Department of Health, August, 1989, p. 44). This represented a shift away from the original philosophy of using methadone treatment only for those with a history of opiate addiction.

McLeod (1990) stated that the main reason that the Prison Medical Service promotes methadone in NSW gaols was as "an AIDS prevention strategy whereby it is hoped that needle sharing will be limited" (p. 6).

The Prison Methadone Program involves a wide variety of personnel, including not only a range of staff at the gaols, but also staff at the community methadone maintenance units to which inmates are allocated on release, and probation and parole officers (subsequently known as community corrections officers) who supervise the offenders in the community and liaise with these community dispensing units.

Although a joint Department of Health/Department of Corrective Services program, responsibility for the administration of the program rested with the Department of Corrective Services from 1986 until 30th June, 1990. From 1st July, 1990 the total budgetary and administrative control of the program transferred to the Prison Medical Service (PMS), a section of the NSW

Department of Health. This led to the dissolution of the Corrective Services Methadone Unit. Assessments and counselling, which had been the responsibility of the Methadone Unit, became the responsibility of the Prison Medical Service. All medical treatment associated with the program has been the responsibility of the Prison Medical Service since the inception of the program. For further details about the administration and operation of the Prison Methadone Program refer to McLeod (1990).

3. Other Prison-based Methadone Maintenance Programs

Although rare, methadone maintenance programs do exist in some other prison systems. In the literature it is noted that such programs either exist or have existed at Rikers Island in New York (Joseph, Perez, Tardalo & Watts (1989)), Contra Costa County in California, Rotterdam in Netherlands, Wolds Remand Prison in the United Kingdom (Daines, Goodstone, Hassan, Anderson & Watkins (1992)), Sweden, Holland and Denmark (Lynes (1989)).

There is very little literature available which describes evaluations of any of these prison-based methadone programs. Joseph et al (1988) describe the "Pre-KEEP" program at Rikers Island in which incarcerated narcotic addicts sentenced to a period of less than a year for a misdemeanour may be accepted into methadone maintenance. In their initial assessment of the program they examined: the proportion who remain in treatment while in gaol (95%), the proportion who following

discharge reported for and were accepted into a community-based methadone program (69%) and provided a profile of the characteristics of a sample of 52 of the prisoners who were accepted into the program. Joseph et al (1989) stated that although concerns were initially raised about security, violent behaviour, and widespread diversion of methadone, none of these problems emerged. They suggested that the lack of major discipline problems among the prisoners of the KEEP program is attributable to the methadone regimen, which relieves not only the acute symptoms of narcotic withdrawal, but also the physical hunger or cravings following the withdrawal of heroin.

4. The Evaluation of the NSW Prison Methadone Program

The evaluation was to be both a process evaluation and a product (or outcome) evaluation.

The aim of the "process" aspects of the evaluation was to provide a description of the program administration and delivery to determine whether the program was operating as specified in the policy statement(s). This included descriptive information such as: the size of the demand for the program; who goes onto the program; the mechanics of the operation of the program; as well as a description of any administrative difficulties experienced within the gaol or the community phases of the program.

The broad aims of the "product" or "outcome" aspects of the evaluation were to examine whether the individuals who

participated in the program were less likely to commit crime, less likely to use illegal drugs (particularly opiates), had increased their life skills and/or received any other benefits. Outcome measures initially included criminal history information, urine analysis results and the self reports of the participants. Subsequently greater emphasis was placed on evaluating methadone's role in preventing the spread of HIV in prison.

While urine analysis is one of the least subjective measures of drug usage it is not a perfect measure. A large variety of drugs can be detected by urine analysis. However, the concentrations of drug traces in the urine depend on a number of factors including: amount of drug used; type of drug; time since drug was consumed; body weight; the rate of metabolism; amount of physical exertion; amount of fluid consumed prior to the specimen being collected; and possible pharmacological interactions with other drugs.

The Prison Methadone Program was not designed in such a way to facilitate evaluation. In order to determine the effects of the Prison Methadone Program one would like to be able to compare how the inmates who participated in the program would have performed had they not participated in the program. While it is not possible for an individual inmate both to participate and not participate in a program at the same time, a research methodology known as "random allocation" can be used whereby two (or more) groups are formed such that there is no reason to believe that the inmates in the two groups differ in any systematic way.

One group would then participate in the program and the other (the "comparison" or "control" group) would not. Any subsequent difference in performance (e.g. offending, drug taking, etc.) could then be attributed to the effects of the program.

For the Pilot Pre-release Methadone Program, and subsequently the Prison Methadone Program, all those who volunteered to participate in the program who were assessed as meeting the eligibility criteria (and for whom there were places) were admitted to the program. Hence it was not possible to have randomly assigned treatment and control groups. In the studies described in this paper, wherever possible the performance of those on the program is compared to the performance of inmates who did not participate in the program. However, because the participants and non-participants were not randomly assigned, there will always remain some doubt as to how comparable those who did not participate are with those who did participate.

The research was designed around the conduct of a number of small, self-contained studies rather than one large study. This was primarily to reduce the time taken to provide feedback about specific aspects of the program to administrators. Structuring the research around a series of small studies also allowed flexibility so that the evaluation could incorporate changes in the program as they occurred.

By December 1991 eleven studies had been conducted. These studies are described

below.

1. A profile of those assessed for inclusion in the program (Wale & Gorta, 1987a)

This profile was based on information recorded in the register maintained by the Methadone Co-ordinator and assessment sheets. As at 1st December 1986, 129 inmates had been assessed for their suitability for admission to the program. This study sought to: provide a profile of the inmates presenting for assessment for the pilot methadone program; determine in what ways those who were assessed as suitable differed from those considered unsuitable; and to look for characteristics of those who were withdrawn from the program.

2. Views of inmates participating in the pilot pre-release methadone program (Wale & Gorta, 1987b)

Thirty-six inmates who had been assessed as suitable for the Pilot Pre-release Methadone Program were interviewed in February - March and June 1987 to ascertain to what extent the pre-release phase of the program was functioning in accordance with the guidelines (Hill, 1986) which had been established. These 36 were all the inmates assessed as suitable for admission to the programs who were in custody at the time of the study. The inmates were interviewed using a standardised interview schedule which included questions concerning: prior knowledge and beliefs about the

program; whether the inmate had experienced any difficulty getting on the program; support programs available in gaol; perceived effects of the program while in gaol; dispensing facilities; urine analysis; expectations about their participation on the program; suggestions for improving the program's operation and other comments.

3. Progress report on first 201 assessments (Gorta, 1987a)

This study sought to track the progress of those people assessed for admission onto the Pilot Pre-release Methadone Program prior to 1st June 1987. The sources of information for this study were: the register maintained by the methadone co-ordinator; records maintained by the community dispensing units; Department of Corrective Services computerised Offender Record System; Department of Corrective Services Prisoner Record and Probation and Parole card systems and the Pharmaceutical Services Branch of the Health Department. Of the 135 inmates assessed as suitable, 105 had been released from gaol onto community methadone programs by 1st July 1987. Records were examined to determine how many of these 105 were still being maintained on methadone in the community and how many had been returned to gaol since their release.

4. Results of gaol urinalyses, January - June 1987 (Gorta, 1987b)

This study examined the results of urine analyses conducted within the gaols for the six month period January - June 1987, pertaining to inmates on the Pilot Pre-release Methadone Program. At this time all urine specimens collected for inmates in NSW gaols were analysed by Oliver Latham Laboratory. A computerised listing of lab. number, name of inmate, date specimen was taken and drug(s) detected was provided for all urine specimens analysed from NSW gaols during this six months period. Of particular interest was the presence of nonprescribed drugs and/or the absence of methadone indicating a possible diversion of methadone.

5. Views of key personnel involved in the administration of the NSW Prison Methadone Program (Hume & Gorta, 1988a)

Between 10th December 1987 and 4th February 1988 51 interviews were conducted with key personnel involved with the administration of the Prison Methadone Program.

Personnel interviewed included: gaol superintendents, custodial officers, prison nursing staff, staff of community dispensing units, probation and parole liaison officers, prescribing doctors, drug and alcohol staff, methadone assessors,

and the methadone co-ordinator. It was felt important to ascertain the views of these people on the operation of the program in order to benefit from what they had learnt when the program expanded to new locations.

This study is somewhat restricted due to the small numbers interviewed from some groups. In the case of superintendents, probation and parole liaison officers, methadone assessors, etc, these small numbers were unavoidable because there were only limited numbers in these groups. However, all groups of personnel directly involved with the program were included, with no suspicion that those interviewed were in any way atypical of the populations they represent.

Separate structured interview schedules were designed for each different group of personnel. The interview schedules consisted of questions relating to: perceived aims of the program, problems with the program and its operation, perceived benefits and disadvantages of the program, perceived success of the program, attitudes towards the expansion of the program, and suggestions for program improvement.

There were essentially four aims of this study:

- to discover how attitudes to the Prison Methadone Program differ between personnel;

- to determine what major problems exist with the program as perceived by different personnel, and to offer possible solutions to these problems;
- to draw on the experience of those who have been involved with the program in order to assist in the process of expansion into other gaols and dispensing units;
- to recommend changes and improvements to the program.

6. Results of community urinalyses for clients on the NSW Prison Methadone Program (Hume & Gorta, 1988b)

This study sought to ascertain the extent of non-prescription drug use by ex-prisoners who were collecting methadone at community dispensing units, in relation to a suitable comparison group. The total sample consisted of 175 clients, 93 of whom were Corrective Services clients. The remaining 82 clients were from the Health Department and were matched with Corrective Services clients on a number of variables, including sex and time spent in treatment. The results of the 2122 tests taken over the four month period from the beginning of November, 1987 to the end of February, 1988, for these clients were examined.

7. The effects of the NSW Prison Methadone Program on criminal recidivism and retention in methadone treatment (Hume & Gorta, 1989)

This study, an update of Study 3, sought to track the progress of those people assessed for admission onto the Prison Methadone Program, prior to 30th June, 1988. It sought to examine, firstly the reoffending patterns of inmates released on the Prison Methadone Program, both in relation to recidivism rates of a suitable comparison group and in relation to offence rates during a time prior to commencement on the program. Secondly the study sought to examine their retention rates in the community methadone maintenance programs since their release from gaol.

Record data were collected pertaining to 377 inmates, 223 of whom had been released from gaol on methadone. These 223 people fell into two subgroups: firstly, those for whom a match was found, referred to as the "matched methadone group" (n=154) and secondly the "unmatched methadone group" (n=69). The remaining 154 people formed a comparison group who were matched with the methadone group on sex, type of release (i.e. to after-care probation, parole, etc.), and date of release, as well as having to be drug involved.

The two major dependent variables

investigated were criminal recidivism and retention in community methadone programs, both of which were measured up to the cut-off date of 31st July, 1988. Recidivism was measured in a number of different ways including return to gaol, number of convictions/charges, type of most serious offence, penalties received, length of further gaol sentences, percentage of time spent in gaol since release, and number of outstanding charges. While these different measures are inter-related, each was examined separately to determine whether participation in the methadone program may have affected some, but not all, of these measures.

8. Views of recidivists released after participating in the NSW Prison Methadone Program and the problems they faced in the community (Bertram & Gorta, 1990a)

This study sought to obtain qualitative information to supplement information collected in Study 7. While this earlier study was able to quantify the reoffending patterns, it was not able to determine what "went wrong" for those who were returned to gaol. The sample, based on that of Study 7, consisted of 50 inmates who had been reincarcerated and were interviewed in gaol between 24th July and 31st August, 1989. Twenty-eight inmates had been released from gaol on methadone and twenty-two inmates were drug involved but were not

on the methadone program when they were released from gaol.

This study sought to:

- outline the perceived problems faced by inmates released on methadone who return to gaol;
- document the reasons inmates released from prison on methadone who return to gaol give for committing their offence(s);
- determine whether these problems and/or reasons differ from other inmates with a drug history who are released (not on methadone) and return to gaol;
- document these inmates' perceptions of the Prison Methadone Program;
- allow these inmates the opportunity to provide some suggestions about how to improve the Prison Methadone Program, to aid in rehabilitation.

9. Inmates' perceptions of the role of the NSW Prison Methadone Program in preventing the spread of Human Immunodeficiency Virus (Bertram & Gorta, 1990b)

This study was intended to be exploratory rather than definitive. It sought to examine inmates' perceptions of the role of the Prison Methadone Program in relation to preventing needle-

sharing and consequently the spread of HIV (and Hepatitis B) in gaol. The sample, the same as that used in Study 8, consisted of 50 prisoners and was based on a comparison between those who had commenced a methadone program (n=37) and those who were drug involved but had not commenced a methadone program (n=13).

The study investigated reported needle-sharing behaviour, concern about contracting AIDS or Hepatitis B, reasons for sharing needles, whether methadone was perceived as being effective in preventing needle-sharing and more effective ways (than methadone) to prevent the spread of HIV in prison.

The interviews were conducted in July and August, 1989.

10. Results of gaol urinalyses update: July - December 1989 (Bertram, 1991)

This study aimed to provide updated information about the results of urinalysis specimens provided by inmates participating in the NSW Prison Methadone Program between July and December, 1989. The sample was based on 3704 urine tests pertaining to 235 inmates. Of particular interest was the presence of non-prescribed drugs, particularly those most likely to be used intravenously. Also of interest was the absence of methadone, potentially

indicating a diversion of methadone.

As for Study 4, a computerised listing providing identifying information and drug(s) detected was obtained from Oliver Latham Laboratory.

11. Evaluation of the administrative changeover from the Department of Corrective Services to the Department of Health (Wolk & Eyland, 1991)

Ninety-one staff (73 custodial officers, 16 Prison Medical Service (PMS) staff and 2 administrators from the Drug and Alcohol Service) were interviewed between November 1990 and January 1991 in order to investigate whether the change in administrative control had any perceived effect on the way the program was run. These staff were interviewed at four correctional centres and at the Department of Correctives Services head office. These correctional centres were selected so that a representative sample from all security classifications, male and female, and city and country institutions was incorporated. Interviews also sought suggestions for improvements to the program.

The purpose of this report is to present a summary of the results of these eleven research studies in one document.

RESULTS

1. Main findings pertaining to the operation and the administration of the program

a.) Characteristics of those assessed for the program

From Study 1 (Wale & Gorta, 1987a) it was found that as at 1st December, 1986, one hundred and twenty-nine inmates had been assessed for admission to the Pilot Pre-Release Methadone Program of whom slightly more were females (55%) than males. The large proportion of female inmates assessed for admission to the program is a reflection of the correctional centres in which the pilot program was conducted. Ages of those assessed ranged from 18 to 41 years with a median of 26 years. Most were single (64%). They had left school at 15 years or younger (69%) having passed neither the higher school certificate (96%) nor school certificate (73%), had undertaken no vocational training (67%) and had experienced numerous job changes and long periods of unemployment. Typically, the inmates' parents were currently married (53%) and knew of their offsprings' drug taking (74%). While the inmates tended to consider that they had a "good" relationship with their parents (52%) and intended to live with them upon release, they tended to report that they had "superficial" relationships with

their associates (60%), most of whom were drug-involved (68%). Those assessed typically had been charged with five or more drug offences (84%); most frequently, self administration of opiates (26%) and break, enter and steal from pharmacies or surgeries (26%). The inmates usually supported their habit through theft (68%) and had three or more charges for non-drug offences (73%), such as stealing/larceny (21%). Only 5% reported not having been charged with any 'non-drug' offences. They were likely to be on after-care probation upon release (61%). When assessed, most inmates' had been addicted to opiates for at least 5 years (83%), being drug-involved by the age of 14 years (64%) whilst still at school (79%). The strength of the inmates' habit, as reported by the inmates, ranged from "1-10 hits" per day, with most inmates (64%) reporting "3-4 hits" per day. The accuracy of such reports cannot be determined. Most assesses reported having at least one period of abstinence (93%), typically for more than 3 months, whilst in gaol. The inmates considered that they did not smoke marijuana or drink alcohol to an extent that it was a problem. Most inmates were likely to have had some previous treatment, typically at Westmount, Langton Clinic, Bourke Street, Odyssey House, WHOS or Wistaria House.

Of the inmates assessed 93 (72%) were considered suitable for entry onto the program. These inmates differed from those assessed as unsuitable in that they tended to have had longer periods of addiction to opiates and to have had more previous treatments for drug addiction. This is consistent with the admission criteria specified in the original policy statement (Hill, 1986).

Study 1 examined, in some detail, the characteristics of the inmates assessed for admission during the first eight months of the Pilot Pre-release Program's operation. This type of analysis was not repeated. Hence we cannot know to what extent these characteristics were shared by inmates assessed in later stages of the program's operation.

b.) Numbers assessed and percentage assessed as suitable

As was stated above, as at 1st December 1986, 129 inmates had been assessed (an average of 16.1 assessments per month since the commencement of the program in April 1986). Ninety-three (72%) of those were considered suitable for entry onto the program.

By 1st June, 1987, (reported in Gorta, 1987a) 201 assessments involving 198 inmates had been made for entry onto the program (giving an average of 14.4 assessments per month). The majority

(70.6%) were assessed as suitable for the program. Six of the inmates assessed as suitable decided to withdraw from the program before they were released from gaol. Hence, in the six months between 1st December 1986 and 1st June 1987, an additional 69 inmates had been assessed (an average of 11 per month). Two-thirds (68%) of these were considered suitable.

Between April, 1986 and 30th June, 1988, 530 assessments of suitability for admission to the Prison Methadone Program had been made (Hume & Gorta, 1989). These assessments involved 484 inmates, since some had previously been assessed as unsuitable for the program and tried again, while others had been released, reincarcerated and then reassessed for the program. The majority of the prisoners assessed (80.4%) were considered suitable for the program. Hence in the thirteen months between 1st June 1987 and 30th June 1988 an additional 286 inmates were assessed (an average of 22 per month). The majority of these (87%) were found to be suitable for the program.

c.) Reasons given for commencing methadone program and expected program duration

When asked why they had commenced the Pilot Pre-release Methadone Program, most of the thirty-six inmates interviewed in early 1987 for Study 2 stated that they wished to get off heroin

and wanted to stay out of gaol. The next most frequent response was that by going on the methadone program the inmates would improve their chances of parole. A sizeable percentage reported hoping to gain a normal life from the program and to re-establish family relationships.

Inmates in Study 2 were asked how long after release they thought they would continue on methadone. Sixteen of the thirty-six interviewed found it difficult to specify a period, saying either that they simply could not say for how long (8 inmates) or that they would continue as long as needed (8 inmates). The twenty inmates who did specify a period of time between six to twenty-four months, with eight thinking that they would stay on the program for 12 months and five for 24 months.

When interviewed in mid-1989 for Study 9, the majority of the thirty-seven inmates interviewed who had commenced a methadone program claimed that they commenced methadone to help them stop using (84%), to stay out of gaol (46%) and/or to establish a normal lifestyle (33%). Very few (8%) reported beginning methadone to help them prevent sharing needles in gaol and consequently contracting HIV, despite the program's emphasis on preventing the spread of HIV and Hepatitis B.

People need not overtly commence

methadone to prevent the spread of AIDS in order for it to be effective for this purpose. However, unless inmates see preventing the risk of AIDS as a role of methadone then they may still put themselves at risk of contracting HIV, by indulging in the occasional shot, which may involve sharing needles.

d.) Operation of the program

From Study 2 (Wale & Gorta, 1987b) it was found that few inmates experienced any problems getting onto the program. Inmates also seemed clear as to the procedures, conditions and consequences of urine analysis and accepted urine analysis as a necessary part of the methadone program. Inmates' expectations indicated an adequate knowledge of the possible medical side effects of methadone.

There was no indication from the inmates (Study 2) of standover tactics nor of a blackmarket in methadone. Study 4 (Gorta, 1987b) also provided no evidence to suggest there was a blackmarket in methadone. Out of a total of 390 urine tests conducted between January and June 1987, in only thirteen (3.3%) was no methadone detected. (In all but one case, specimens in which no methadone was detected were the first specimens taken from individuals.) This finding was replicated in Study 10 (Bertram, 1991) where no methadone was detected in

only 2% of specimens, taken between July and December 1989.

e.) Opinions about expansion of the program to more gaols and to more dispensing units

In Study 5 (Hume & Gorta, 1988a) over one-third of the 51 staff interviewed about their attitudes to and perceptions of the program (37.5%) felt positive about expanding the program to other gaols and dispensing units, while 12.5% were positive with reservations, 29% were negative and 21% were neutral about expansion.

f.) Perceived administrative difficulties

i) Inmates' concerns

From Study 2 (Wale & Gorta, 1987b) the following problems were expressed by inmates on the program in early 1987.

In the pilot program, which was limited to a small number of institutions, transferring to an appropriate gaol for assessment for the program (which sometimes involved problems of classification) had proved difficult for some.

Contrary to the program's guidelines (Hill, 1986), implementation of the policy paper had not resulted in an integrated approach in which the

methadone program was augmented by other services. At the time Study 2 was conducted, inmates felt that they had little support from programs other than the methadone program. Whilst many inmates (71%) were aware of support programs they were seen to be unrelated to, if not incompatible with, the methadone program and few attended them. Nor was such involvement seen to be taken into consideration during assessment for methadone let alone the provision enforced that inmates involve themselves in such programs.

Administration of urine analysis proved problematic with some inmates having difficulties with providing specimens, privacy and accepting the validity of results. To solve these problems inmates most frequently suggested that half day's notice for a specimen be given (36%) or that a period rather than a specific time be allocated (29%).

Procedures used in dispensing the methadone (both timing and measuring) were reported as problematic and, along with the side effects of methadone, were mentioned as the worst features of the methadone program. Some of these problems were said to be due to the allocated dispensing times, e.g., that they were too early or that they coincided with visits.

The extent to which participation on the

methadone program was believed to improve an inmate's parole prospects was cause for concern when the policy clearly stated that the program was a voluntary methadone program, not linked in any way with pre-release reports.

ii.) *Staff concerns*

In Study 5 (Hume & Gorta, 1988a) a wide variety of problems and program disadvantages were conveyed by staff involved with the program in late 1987 and early 1988. These included:

- inmates and gaol staff not being adequately prepared or educated about methadone and its effects;
- inadequate and/or inappropriate assessments for admission to the program;
- inmates being perceived as going on methadone to secure early release or as a condition of parole;
- standovers within the gaols;
- inability to progress through classification to all institutions while on methadone;
- inadequate dispensing facilities, particularly at Parramatta Gaol and Bathurst X-Wing;
- lack of proper facilities for urine testing;
- perception of a black market in methadone in the gaols, especially at Parramatta;
- urine guidelines both not strict enough and not enforced properly;
- topping up/using illegal drugs (both in gaol and the community);
- physical and behavioural side-effects apparent in the initial stages of stabilisation on the drug;
- support programs for those on methadone were considered to be inadequate;
- lack of time the probation and parole liaison officers have for primary care and counselling at the community dispensing units.

It must be emphasised that Study 5 sought to elicit problems which respondents perceived were occurring. There was no follow up to attempt to verify or substantiate any of these claims. The data collected are based on the perceptions of staff involved with the program. Hence the problems raised in this study are not necessarily factual. By their very nature, interview data are subjective, and consequently consideration needs to be given to this when interpreting the results of this study.

Three years later Wolk and Eyland (1991) found that the staff they interviewed identified several major problems with the operation of the program. Wolk and Eyland itemised the areas of concern as follows:

- "a substantial lack of understanding or even knowledge of the aims and

objectives of the Prison Methadone Program amongst all categories of staff actually involved in the program;

- this lack of understanding of the aims has been given great impetus by a corresponding lack of direct formal and continuing communication between all parties concerned;
- there has been an ineffective promulgation of the program's policies that have already been developed and an established need to develop new policies that reflect a consensus of the competing philosophies that currently exist in the program;
- the operation of counselling services for those on the Prison Methadone Program was seen to be subject to a great deal of confusion by the majority of staff with concern as to its operation being woven throughout the many responses given;
- the staffing levels and facilities available to the Prison Methadone Program were subject to various strong criticisms and represent an area for explicit further investigation" (p.4).

Other problems raised by those in Wolk

and Eyland's study included:

- problems with the holding period (the procedure which involves detaining inmates for a period of up to 20 minutes in a small yard outside the clinic, after they have ingested their methadone) (reported by 79% of staff interviewed);
- difficulties with escorting inmates to the clinic for their methadone pick-up (reported by 40% of custodial staff).

g.) Opinions about methadone as an AIDS and Hepatitis B prevention strategy

It is not possible to evaluate the extent to which the Prison Methadone Program has been able to reduce the spread of HIV and Hepatitis B because of the lack of reliable data on the spread of HIV or Hepatitis B prior to the methadone program. Moreover there is a lack of reliable data on either the extent of needle use, or the extent of these viruses within the prison system and/or the general community.

Study 9 (Bertram & Gorta, 1990b) investigated inmates' perceptions of the role of methadone in preventing the spread of HIV. If reports of the prisoners can be taken at face value, the findings of this study indicate that needle-sharing within gaol is a possible

source of transmission of HIV and/or Hepatitis B, with 56% of the 50 inmates interviewed admitting to having shared needles in gaol at some time in the past. Of those not concerned by the threat of AIDS when sharing needles (39%), most (31%) would be at risk of contracting AIDS and/or Hepatitis B because of inadequate needle cleaning procedures.

Inmates appeared to be relatively aware of the incidence of HIV. In contrast, they were relatively ignorant about the dangers of Hepatitis B.

Almost two-thirds of the inmates interviewed (60%) in Study 9 stated that methadone should **not** be used specifically to prevent the spread of HIV, rather it should remain an option for long-term heroin addicts to change some aspect of their lifestyle. Twenty-eight per cent of inmates interviewed, however, believed that stopping the spread of AIDS should be a salient objective of methadone. They thought that this was because it did stop people using and consequently sharing needles.

Three-quarters of the sample (74%) stated there were more effective ways than methadone to stop the spread of HIV in gaol. They said these included the provision of: clean needles (56%), mentioned less frequently by those who had experienced methadone; cleaning solutions (20%), stated more frequently

by those who had experienced a methadone program; education, for example, increasing awareness of HIV and needle-sharing procedures (14%); and to legally introduce drugs into prison (10%).

The majority of inmates in Study 9 claimed that they commenced methadone to help them stop using heroin (84%), stay out of gaol (46%) and establish a normal lifestyle. Very few (8%) reported beginning methadone to prevent catching HIV, despite the policy emphasis on preventing the spread of HIV and Hepatitis B.

In Study 11 (Wolk and Eyland, 1991) staff were asked what they thought were the aims of the Prison Methadone Program and whether they thought the program could achieve these aims. The vast majority of PMS staff interviewed (13 out of 16) saw that an aim of the program is to decrease the spread of HIV. Furthermore half of the PMS staff interviewed thought that this specific aim was possible. This is in contrast to that reported by the custodial staff where only 4 out of 73 surveyed actually stated that an aim of the Prison Methadone Program was to decrease the spread of HIV.

Those who thought that it would not be possible for the Prison Methadone Program to decrease the spread of HIV (8 of the 17 who suggested this aim)

said that this was because they thought that inmates still used intravenous drugs (not necessarily opiates) while on the program and when released from gaol.

h.) Suggested improvements

i.) Suggestions by inmates

Nineteen of the thirty-six inmates interviewed in Study 2 suggested improvements for the operation of the program. The suggestions offered focussed on two areas: methadone dispensing (45%) and more support for people on the methadone program both inside and outside gaol (26%). More specifically, suggestions regarding dispensing were: change the dispensing time in gaol, change the dispensing procedures in gaol and increase the accessibility to methadone in the community (each 15%).

ii.) Suggestions by staff

The suggestions made by the 51 staff interviewed in Study 5 could be divided into four different topic areas: staffing; increased control; post-release; communication; as well as a variety of other issues. There was seen to be a need for more staff to provide counselling, groups, and drug and alcohol services in the gaols as well a need for specialist methadone staff, such as a methadone nurse or sister for both dispensing and counselling.

The need for greater control in a variety of areas was expressed. Different types of staff involved with the program suggested that the information which is given by inmates at assessment needs to be verified to avoid inappropriate people being admitted to the program. A range of staff voiced the need for stricter guidelines with respect to urinalysis and the enforcement of these guidelines.

The need for follow up and support on release in the form of accommodation or financial assistance was expressed by community dispensing unit staff, custodial staff and prison nursing staff.

It was felt by a small number of people interviewed that the communication and information transfer at different levels was unsatisfactory. In particular, the staff at the community dispensing units suggested that they should receive more information about inmates being released to their unit, e.g., information about assessment and drug histories. Additionally, dispensing unit staff felt they should be notified if a client on their program is rearrested or resentenced so they could know whether or not to keep him/her on their books.

The importance of providing education for both inmates and gaol staff about methadone and its effects before inmates are prescribed methadone was

stressed.

In Wolk and Eyland's study (1991) one-third of the custodial staff interviewed thought that the program's problems were insurmountable and that the program should be abolished. Suggestions from the custodial staff who did suggest improvements for the existing program included: the need for better screening and stricter selection and the need for more counselling and follow-up when inmates come off the program.

Prison Medical Service staff in Wolk and Eyland's study stated that more resources, in terms of both staff (including specialised methadone nurses) and facilities, were required. Furthermore they suggested a multi-disciplinary team approach be used and that communication between the PMS administration and 'frontline staff' (nurses) should be improved.

Both custodial and PMS staff saw a need for more counselling and follow-up when inmates came off the program, whether to release or not, and the need to provide more education of both custodial officers and clinic staff regarding the methadone program. A suggestion also made by both custodial and PMS staff was that the methadone dispensing clinic should be one that is entirely separate to the general medical clinic.

2. Main findings pertaining to outcome evaluation

a.) Retention in the methadone maintenance program

From Study 7 (Hume & Gorta, 1989) it was found that of the 223 inmates on the Prison Methadone Program who had been released as at 30th June 1988:

- 33.6% were continuously on community methadone programs since their release and up to 31st July 1988;
- 34.5% stopped treatment either of their own accord or involuntarily;
- 31.8% stopped community treatment due to incarceration.

Of those who stopped community methadone treatment either voluntarily or involuntarily, the majority (79.3%) did so within six months.

From Study 8 (Bertram & Gorta, 1990a) it was found that the reasons inmates gave for ceasing the methadone program included the difficulties involved in daily methadone pick ups (36%) and because they returned to gaol (32%).

From Study 3 (Gorta, 1987a) it was found that all three community dispensing units which were part of the

pilot program appeared to have similar retention rates.

b.) Completion of probation/parole supervision

A supervised parole or after-care probation period of not less than six months was one of the original criteria for eligibility for admission to the pilot program. From Study 3 (Gorta, 1987a) it was found that, as at 1st August 1987, the majority of those released on the program were still under the supervision of the Probation and Parole Service (60%). Some had completed their supervision period without incident (10%). Others had either breached their supervision orders (4%) or had their supervision orders revoked (10%). It would be of interest to compare these revocation rates with revocation rates for all those on after-care probation and for all those on parole. Unfortunately comparable information for other after-care probationers and parolees was not available.

c.) Reoffending patterns

In Study 7 (Hume & Gorta, 1989) "reoffending" was measured by a number of different indicators including return to gaol, number of convictions or charges, type of most serious offence, penalties received, length of further gaol sentences, percentage of time spent in gaol since release, and number of

outstanding charges. While these different measures are interrelated, each was examined separately to determine whether participation in the methadone program may have affected some, but not all, of these measures.

From Study 7 it was found that 48% of the methadone group had been reincarcerated since their release and before 31st July, 1988 however the difference between the matched methadone (43%) and comparison (33%) groups on this measure was not statistically significant ($X^2_1 = 3.54, p < .1$).

Seven out of every ten of the methadone group (70%) were reconvicted or charged in court since release, but there was no difference between the matched methadone (65%) and comparison (57%) groups on this variable ($X^2_1 = 1.65, p > .1$).

The average number of convictions/charges since release for the methadone group was 4.4; the matched methadone group had more convictions/charges since release (3.6 on average) than the comparison group (2.6 on average) ($t_{306} = 2.01, p < .05$).

The most common offences committed by the methadone group following release were offences against property, e.g. break, enter and steal, car theft, common theft, etc. (total 55%),

followed by robbery offences (10%), fraud (8%), offences against order (8%), assault/homicide (7%) and drug offences (5%). There was no difference between the matched methadone and comparison groups in types of most serious offence committed since release ($X^2_8 = 3.53$, $p > .1$).

The most common type of penalty received by those in the methadone group was a further gaol term (38%), followed by a fine (29%), good behaviour bond (9%) and community service order (2%). Those in the matched methadone group were significantly more likely to receive a gaol sentence than those in the comparison group ($X^2_1 = 4.64$, $p < .05$).

The methadone sample spent 18.5% (on average) of their time since release back in gaol. Those in the matched methadone group spent significantly longer periods in gaol (19.5%) than those in the comparison group (12.9%) ($t_{306} = 2.13$, $p < .05$).

The average number of unfinalised cases (i.e. not resolved in court at the time of data collection) was 1.0 for the matched methadone group and .9 for the comparison group.

One-quarter of the methadone group (24.7%) had committed more serious offences since release than in the

equivalent time before their episode on the prison methadone program, while 37.7% committed less serious offences since their release, 29.6% had not reoffended since release, and 7.6% had committed equally serious offences since release as prior to incarceration.

Those in the methadone group who were 'at risk' for at least 3 months committed significantly fewer offences since their release (4.6 on average) than in the equivalent period prior to their incarceration (14.8 on average) ($t_{189} = 10.1$, $p < .005$).

Fewer robbery offences were committed since release (8%) than prior to incarceration (20%) ($X^2_8 = 20.74$, $p < .01$).

The majority of the inmates in Study 8 (72%) reported committing their current offence(s) for financial reasons, this was either to support their drug habit (42%), for personal financial reasons (24%) or a combination of both these reasons (6%).

More than two-thirds of the sample in Study 8 (70%) stated that they used drugs when they committed their current offence. The drugs most frequently mentioned were heroin (34%), heroin and benzodiazepines in combination (16%) and benzodiazepines (28%).

d.) Drug use in gaol

Study 4 (Gorta, 1987b) examined the results of 390 urine tests taken from 63 inmates on the program during the six months period January - June 1987. In the majority of specimens (90%) no non-prescribed drugs were detected. Forty-seven non-prescribed drugs were detected in 39 specimens, with oxazepam being the most frequently detected drug.

Almost two-thirds of the inmates (63%) had no specimens in which non-prescribed drugs were detected. One in five (21%) had one "dirty" specimen while one in nine (11%) had two "dirty" specimens in this period. Three inmates (5%) had more than two "dirty" urines. Fifteen of the 39 "dirty" urines (38%) were obtained from inmates who had been released and returned to gaol.

Hence, while there has been some use of non-prescribed drugs by inmates on the program detected during this period, the extent of use does not seem to signify a major problem.

Study 10 (Bertram, 1991) provided updated information about drug use in gaol. In this study the results of 3704 urine tests over a six month period (July - December 1989) provided by 235 inmates, were analysed.

The majority of the specimens (90%)

showed no evidence of non-prescribed drug use. This is the same proportion as that found in Study 4.

Half of the inmates (54%) had no non-prescribed drugs detected in any of their specimens. This is a considerable decrease from the percentage of inmates with no non-prescribed drug use in Study 4. One-fifth of the inmates had one 'dirty' urine only. Thus, while a large proportion of inmates provided a urine specimen containing non-prescribed drugs, this was in most cases limited to one or two instances. Non-prescribed use of benzodiazepines was most frequent, detected in 5% of the specimens pertaining to 29% of the inmates. Tricyclic anti-depressants were detected in 2% of the specimens, pertaining to 16% of the inmates. Approximately 1% of tests, pertaining to 12% of the inmates, showed either morphine or amphetamines, the drugs most likely to be used intravenously. Seven inmates (3% of the sample) showed evidence of more than three dirty urines in a three month period. Once inmates have reached this level of non-prescribed drug use, they may be removed from the program.

The most notable difference in the two studies is a change in the types of drugs found in specimens, that is, an increase in tricyclic antidepressants, amphetamines and morphine. Also, a greater number of prisoners showed

evidence of non-prescribed drug use.

In a study of behaviour which would put inmates at risk of contracting HIV in gaol, Potter & Conolly (1990) interviewed a random sample of 158 inmates from six NSW gaols between November 1988 and March 1989. Twenty of their sample said that they were on the Prison Methadone Program at the time of the interview and a further eleven stated that they had previously been on methadone. Seventeen of these thirty-one claimed that they had used drugs intravenously while on the methadone program. We do not, however, know how often these inmates shared a needle, nor do we know how often they would have shared a needle in the absence of a methadone program.

e.) Drug use in the community

Study 6 (Hume & Gorta, 1988b) examined the results of 2122 urine tests taken over the four month period from the beginning of November, 1987 to the end of February, 1988 for 93 Corrective Services clients and 82 Health Department clients who formed a comparison group.

The majority of both groups of clients (88% for Corrective Services clients, 81% for Health clients) had methadone present in **all** of their urine samples. This indicates that there is no evidence

of a major problem of a methadone black market.

Only one in every ten clients (15% for Corrective Services clients, 5% for Health clients) had **no** non-prescribed drugs detected over the four month period.

On average, half (50%) of the tests taken contained non-prescribed drugs (50% for Corrective Services clients, 51% for Health clients).

Approximately one-quarter (26%) of the sample (33% for Corrective Services clients, 18% for Health clients) had **no** heroin detected in their urines. On average, one-third (35%) of the tests taken contained heroin (31% for Corrective Services clients, 39% for Health clients).

Health clients at Liverpool had heroin detected significantly more often than Corrective Services clients at Liverpool ($t_{63} = 2.54, p < .014$). Corrective Services clients at Rankin Court had heroin in their urines significantly more often than Corrective Services clients at Blacktown and Liverpool ($F_{2,90} = 3.64, p < .05$).

The most commonly detected non-prescribed drug was heroin or morphine (31%), followed by benzodiazepines (11%) and amphetamines (5%). A variety of other non-prescribed drugs

were detected, including codeine, quinine, analgesics, and cocaine.

Corrective Services clients were significantly more likely than Health clients to have urine samples containing more than one non-prescribed drug, that is, to be polydrug abusers ($X^2_1 = 31.85$, $p < .001$).

The amount of time in treatment was found to be inversely related to both per cent of urines containing non-prescribed drugs and the per cent of urines found to be positive for heroin. That is, as a person spends longer in treatment, the proportion of both his/her dirty urines and heroin positive urines will decrease. However, the relationship between the time spent in treatment and these two outcome variables is not strong enough to have any predictive power. The age of clients was not found to be related to per cent dirty urines or per cent heroin positive urines.

Study 8 (Bertram & Gorta, 1990a) found that 87% of those in the sample registered on a community methadone program reported using illicit drugs when on the community methadone program. The drugs reported being used included heroin (42%) and benzodiazepines (42%).

f.) Other benefits of the program

i) Perceived benefits reported by inmates

In Study 2 (Wale & Gorta, 1987b) typically inmates reported that the methadone program had led to benefits for them (84%). Twenty-seven of the thirty-six inmates interviewed felt that being on the methadone program had changed aspects of their life in gaol. Inmates responded that they had stopped hustling for, using and thinking about heroin (33%), felt less aggressive, quieter and more relaxed (21%), had a new outlook, were more thoughtful and aware (12%) and felt that going on the methadone program had made their time in gaol easier.

The inmates felt that their being on the methadone program had led also to benefits for the gaol (75%). They stated there was less using and hustling (37%), fewer bashings and standovers (30%) and the gaol was calmer (22%).

Sixty-five per cent of the inmates felt that there were also benefits other than for those mentioned above, namely: benefits for the addict's family (50%) and the community (22%).

The theme was continued through Study 8. Interviews with a sample of thirty-one of these people who had been reincarcerated, twenty-eight of

whom had been released from gaol continuing methadone treatment and three people who had since commenced a community methadone program revealed that they considered that the methadone program helped them. Despite these people returning to gaol, most of these inmates (87%) stated that methadone helped them stop using or reduced their heroin use. Three-quarters of these inmates (77%) reported that methadone aided them in reducing the number of crimes they committed, either specifically because it reduced their habit or more generally because they experienced a change in lifestyle.

Other positive aspects of methadone maintenance were stated to be: curbing or removing the need to use heroin (49%), establishing a stable lifestyle (41%) and psychological benefits (30%).

ii.) Perceived benefits reported by staff

The majority of the 51 staff interviewed in Study 5 (86%) stated that they thought that the methadone program does provide benefits. Benefits for the individual, for gaol management and for the community were mentioned.

The perceived benefits of the methadone program reported by staff in Study 5 were as follows:

- control of an individual's drug

habit;

- inmate not having to rely on illegal drugs;
- less risk of death and disease;
- keeps some from returning to gaol;
- provides contact with caring services;
- inmates being easier to look after;
- reduction in violence and drug trafficking in gaols;
- reduces worry of finding dirty needles;
- less crime in the community.

One-third of custodial staff (34%) and two-thirds of PMS staff (63%) in Study 11 thought that the Prison Methadone Program contributed to easier management of inmates in that:

- it reduced aggressive behaviour of inmates, as methadone prevented them going through withdrawal and
- it reduced the trafficking of illicit drugs in the gaol and controlled illicit drug use by inmates.

Custodial staff also thought that the program was useful in that it helped to control heroin addiction in prison and that it prevented illegal trafficking in methadone as the program now made methadone legally available.

DISCUSSION

The basic question which one would like to be able to answer is "Does the NSW Prison Methadone Program work?" To be able to answer this question one must have a clear idea of what the program is trying to achieve. As mentioned previously, the aims of the NSW Prison Methadone Program have changed dramatically since the program commenced in April 1986. Initially the program focussed on 'improving levels of social/behavioural functioning' and 'breaking the cycle of criminal activity associated with drug use'. However, with the growing concern about the incidence of HIV, the philosophy of methadone maintenance in prison moved towards an AIDS prevention strategy. The program's objectives were revised initially in October 1987 and then again in August 1989. There was no mention of the earlier objectives of 'improving levels of social/behavioural functioning' or 'breaking the cycle of criminal activity associated with drug use' in these revised objectives. Such major changes to the nature of the program which involve staff assessing prisoners for entry to the program for different reasons, at different (but not well-defined) times, makes evaluation difficult.

The conclusions that one can draw about the Prison Methadone Program are further restricted by the absence of a randomised control group. Hence, while the performance of those on the program has

been monitored, information is not available about how these or a similar group of prisoners would have performed had the Prison Methadone Program not existed.

What we do know from the studies conducted is that, as was the case for the Pre-KEEP program at Rikers Island, there was no evidence to suggest that anticipated problems such as a blackmarket in methadone and potential standovers did occur. We also know that inmates seemed clear as to the procedures, conditions and consequences of urine analysis and accepted urine analysis as a necessary part of the methadone program.

Indications of success have been mixed with regard to the individual aims of the program. With regard to the aims "reducing involvement in criminal activities" and "breaking the cycle of criminal activity associated with drug use" Study 7 indicated that while the NSW Prison Methadone Program enables some people to reduce their criminal activity, there are others who do reoffend and may be reincarcerated. The most important of the many measures which comprise criminal recidivism revealed no significant difference between the methadone and comparison groups. Specifically, the matched methadone and comparison groups were equally likely to be reincarcerated and to be reconvicted/charged in court. In contrast, however, the matched methadone group had more convictions/charges on

average than the comparison group (4.4 versus 3.6), were more likely to receive a further gaol term (37.7% versus 22.7%), and spent a higher percentage of their 'at risk' time in gaol than the comparison group (19.5% versus 12.9%).

Information about reported behaviour in gaol as well as in the community is available with respect to the aim of "improving levels of social/behavioural functioning". Some inmates on the program claimed that they had stopped hustling for, using and thinking about heroin; felt less aggressive and more relaxed and felt that going on methadone had made their time in gaol easier (Wale & Gorta, 1987b). Some officers echoed this, stating that the Prison Methadone Program had led to benefits for the gaol: inmates being easier to look after, reduction in violence and trafficking in gaols (Hume & Gorta, 1988). Even inmates who returned to gaol reported that being on the methadone program had helped them following release. Of a sample of 28 inmates who had been reincarcerated since their release on methadone, 22 said that methadone helped them reduce/stop using heroin and 19 stated that methadone helped decrease the amount of crime they committed (Bertram & Gorta, 1990a).

With regard to the use of the Prison Methadone Program as a strategy to "reduce the spread of HIV and Hepatitis B", it is not possible to directly evaluate the extent to which the Prison Methadone

Program has been able to achieve this aim because of the lack of reliable data on the spread of HIV or Hepatitis B prior to the introduction of the methadone program. Moreover there is a lack of reliable data on either the extent of needle use, or the extent of the viruses within the prison system and/or the general community.

Closely related to the aim of reducing the incidence of HIV are the aims of "limiting the spread of drug use" and "reducing the incidence of intravenous heroin use". We have collected data which indicate that inmates on the Prison Methadone Program tend not to use drugs intravenously while on the program. Bertram (1991) found that approximately 1% of 3704 urine samples collected over a 6 month period, pertaining to 12% of the 235 inmates providing the samples, showed either morphine or amphetamines, the drugs most likely to be used intravenously. We cannot know, however, whether this is the result of the Prison Methadone Program or the scarcity of drugs available within the prison system. In contrast, there is also evidence that some inmates may continue to share needles while on methadone. Potter and Conolly (1990) found that seventeen of their sample of thirty-one inmates who had been on the Prison Methadone Program claimed that they had used drugs intravenously while on methadone. We do not know how often these inmates shared a needle, nor how often they would have shared in the absence of a methadone program.

Findings were less positive with regard to the aim "to provide access to a range of counselling services". The operation of counselling services for inmates on the Prison Methadone Program was seen to be subject to a great deal of confusion by the majority of staff in the most recent study conducted (Wolk & Eyland, 1991) as well as being identified as a problem in an earlier study of staff opinions (Hume and Gorta, 1988a) and in a study of inmate views (Wale & Gorta, 1987b).

The operation of the Prison Methadone Program has not been problem-free. Studies (Hume & Gorta, 1988a; Wolk & Eyland, 1991) have demonstrated the need for better communication of the aims of the program and education about methadone and its effects; the need to clearly delineate responsibility for inmate counselling; and the importance of investigating the adequacy of staffing levels and available facilities.

In summary, the Prison Methadone Program has not remained static but has continued to evolve. Inmates and staff report benefits of the program. Staff also express concerns about the program. There is no evidence that criminal recidivism for those on the program was less than that for similar prisoners who did not participate in the Prison Methadone Program. However, even those who could be seen as "failures", i.e., those who return to gaol, claim that methadone helped them reduce their use of heroin and helped decrease the amount of

crime they committed. The majority of inmates tend not use drugs intravenously while on the program; it is not clear whether this is the effect of the program or the limited availability of drugs in prison. It would seem, however, that some inmates on the program do continue to share needles.

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