

# Interventions by Specialised AOD Clinicians in Justice Settings: A Review of Literature

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# 1. EXECUTIVE SUMMARY

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Evidence suggests that a significant proportion of people in criminal justice settings in New Zealand, and internationally, use alcohol and other drugs (AOD) problematically (Whitney 1992, Lapham 2005, Peters and Wexler 2005). The literature indicates that involvement in criminal justice settings increases the chance of the identification of substance abuse problems, better engages people in treatment and delivers more successful treatment than for people in a general population (Project MATCH Research Group 1997, Miller et al 2000, Hussain et al 2005).

## **Search parameters**

The review involved five steps, which fell into the three broader stages of search, assessment and analysis. The search parameters limited the results to literature published in English during the previous ten years. The search terms targeted publications that had specific content on specialised clinical interventions for AOD abuse in justice settings.

The primary search was internet-based and used bibliographic databases and government and research organisations. A secondary search reviewed the bibliographies of the relevant publications found in the first search.

The search identified more than 160 publications, of which 45 were directly relevant and reviewed for this project. About two-thirds of the literature was from the United States of America and a quarter from New Zealand, with the remaining publications coming from Canada, Australia and the United Kingdom. The majority of publications were published in the previous five years.

## **Key findings/themes**

The research reviewed for this project indicates that several types of treatment are effective in reducing substance abuse. Matching treatment to the person improves effectiveness for a range of treatments. It is particularly important for offenders, as inappropriate treatment can increase the chance of violent and criminal behaviours. Treatment matching depends on the nature of a person's substance abuse, personal characteristics such as age, ethnicity and co-disorders, and how they are involved with the criminal justice system. That is, when, why and for how long people receive treatment in a criminal justice setting.

The literature identified the following findings on successful AOD treatment:

- Involvement with the criminal justice system can engage AOD abusers in treatment.
- Screening, assessment and treatment matching have potential as cost-effective interventions, particularly as inappropriate treatment has been shown to be counter-productive for low-risk offenders, young offenders and psychopaths.
- Community-based and diversionary programmes, such as youth and adult drug courts, are effective for low-risk offenders.
- Motivational enhancement and cognitive-behavioural treatments are widely regarded as effective.
- Therapeutic Communities are one of the most effective interventions in prison settings.
- Aftercare is valuable in sustaining treatment and reintegrating prison inmates into society.

## **Youth-specific themes**

Youth are involved in a range of justice settings. A large proportion of youth may be involved in AOD treatment because of their criminal behaviour rather than because of voluntary choice. The literature suggests the following conclusions:

- Both brief and long-term interventions are effective for youth, although there is limited evidence directly comparing the effect of treatment duration.
- Early intervention, and at early ages, can avoid risk factors developing, thereby reducing the risk of more serious problems developing, which require more intensive intervention.
- Youth drug courts and the associated diversionary processes reduce substance abuse and criminal behaviour.
- Structured, individual programmes work better for young offenders in prison settings than group programmes.
- There are gender differences in the experiences of youth in the criminal justice system, which are likely to affect what type of treatment is appropriate and effective.

## **Policy insights**

The findings in the literature suggests a number of insights that may be used as an evidence base for developing policy around specialised AOD treatment in criminal justice settings:

- Involvement in criminal justice settings improves AOD treatment outcomes.
- Treatment is more effective when matched to individual characteristics such as age, ethnicity and co-occurring disorders, and environmental factors relating to social acceptability and support for treatment.
- Treatment may be effective but it is not unambiguously effective and the effects can differ across populations.
- Resources should be concentrated in areas of proven effectiveness.
- There is a case to support evaluation studies of interventions.
- The usefulness of evaluations depends on the definition of AOD conditions, the types and measures of treatment outcome, an allowance for variation in participant and environmental characteristics, and whether both absolute and relative effectiveness are assessed.

## **Caveats**

The search identified literature content covering a range of justice settings, conditions requiring treatment, and types of intervention. The nature of this review involved literature across broad fields with ambiguous boundaries. Such a review necessarily involves judgements on how to restrict it in order to provide a comprehensive but practical review that would meet the Alcohol Advisory Council of New Zealand's main interests.

The review covered a broad range of criminal justice settings and structures, for example drug courts, prisons and probation services, which take different forms and have different constraints across countries. In addition, interventions for specific AOD problems cover a wide spectrum.

Many of the publications were descriptive and outlined the scope of intervention settings and treatments, rather than providing evaluative research evidence on the relative effectiveness of an intervention.

A limitation of the search results was that there were few publications that robustly evaluated effectiveness or outcomes, or compared the relative economic merits of different treatments. The paucity of evaluation research may be addressed over time. The search indicates a substantial increase in the number of publications in the past five years compared with publications in the past ten years or literature more than ten years old.

A significant proportion of the literature identified by the search was of New Zealand origin, but the majority of the literature came from the US. While the US literature may contribute to the evidence base for New Zealand policy makers, it should be interpreted in light of the differences between the social and justice contexts of these countries. For example, a significant number of studies analysed the use of dedicated adult drug courts in the US, but dedicated adult drug courts are not currently a feature of the New Zealand justice system. Differences in the relative level of public provision and funding may also be significant, for example a larger proportion of community-based services appear to be privately provided or funded in the US than in New Zealand.

## 2. INTRODUCTION

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The Alcohol Advisory Council of New Zealand (ALAC) commissioned BERL to review the literature on alcohol and other drug (AOD) clinical interventions in justice settings. ALAC sought a review that primarily focused on AOD interventions used in early-stage criminal justice settings, that is, police cells and courts, and on new or minor offenders. ALAC also asked for the review to identify separately literature on youth populations, and for BERL to provide evidence-based policy insights.

BERL designed a pragmatic review that focused on ALAC's primary research interests, while recognising the project's time and resource constraints. The search covered all New Zealand literature and selected international literature, concentrating on interventions specifically targeted to AOD treatment. It restricted attention to literature published in English during the previous ten years, but allowed for older publications that were frequently referenced as significant works.

To reduce the search results to a manageable number for review, greater weight was put on interventions for people involved in earlier stages of the justice system and less weight on interventions for long-term offenders, probationers and community-based aftercare. Treatments involving methadone were intentionally excluded in order to focus on interventions designed to reduce or eliminate dependency rather than to manage drug users with severe, persistent dependency.

Section 3 describes the method used for the review. The review involved five steps, which fell into the three broader stages of search, assessment and analysis.

Section 4 describes the results of the search and the characteristics of the relevant literature. This section is primarily descriptive and provides an overview of the age, country of origin and scope of the literature and key findings of individual publications.

Sections 5 and 6 use BERL's assessment and analysis of the literature to generate themes and policy insights. These sections synthesise the body of literature rather than focus on the content of specific publications, drawing on the source materials as the evidence base for these sections.

The appendix contains summary assessments of selected publications. The summaries concentrate on individual publications and note points that are relevant to this review.

### 3. METHOD

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This section describes the method used for the review. The review involved five steps that fell into the three broader stages of search, assessment and analysis. The first two steps involved designing the search parameters and searching for relevant publications. The next two steps assessed the search results for relevance, and reviewed and analysed relevant publications. The analysis was framed in terms of themes identified from the literature and ALAC's requirements, for example discussing youth as a population of interest and drawing out policy insights. The final steps involved compiling the report and working with ALAC to incorporate feedback. The method is described in more detail below.

#### Step one

BERL worked with ALAC to design search parameters that would target the relevant set of literature. The search criteria aimed to identify literature with three types of content relating to: the settings; the conditions (to be treated); and the interventions. These criteria were further classified into the subject areas of youth populations and policy insights.

Settings	This criterion required interventions to be delivered due to involvement with the criminal justice system. Initially the search did not restrict the criminal justice setting, but to reflect ALAC's interest in early intervention and the extensive literature on probation and aftercare in the community, the literature was filtered to focus on interventions in early-stage settings.
Conditions	Specific search terms included AOD, substance dependency, substance abuse and substance disorders. Given the focus of the review, the search interpreted drugs to mean illegal drugs. The search did not aim to find literature on the abuse of legal pharmaceuticals, which can also be referred to as drugs.
Interventions	This criterion included clinical interventions involving trained professionals which targeted AOD. This focus excluded interventions that could include some AOD treatment component, such as family group conferences and forensic psychiatric assessments in courts.

Within these content areas, search terms were included to identify interventions separately for youth population and evidence for policy insights.

The search criteria also included practical limits. The search was restricted to literature published in English during the previous ten years. Older publications that were referred to in relevant publications that met the content-related search criteria were also identified.

The search had one explicit exclusion criterion. Treatments involving methadone were intentionally excluded in order to restrict the focus to interventions designed to reduce or eliminate dependency rather than to manage drug users with severe, persistent dependency.

**Step two**

In the second step we searched for literature within the parameters designed in step one. The initial search was wide ranging and used internet search engines, internet-based bibliographic indices and published content of relevant organisations such as the United Nations, the New Zealand Ministry of Justice, the New Zealand Ministry of Health and local and international academic research units.

**Step three**

In the third step the research team filtered the results from step two to identify publications that were most relevant to the project's focus. The relevant publications were summarised and themes in the literature were identified. These outputs, along with the specific interests of ALAC, were used to design a framework against which the content of each publication was assessed. For example, each publication was examined for: information on youth-specific interventions; the stage of the criminal justice setting in which an intervention occurred; and evaluation of an intervention's effectiveness. In addition to the initial search, a targeted search involved cross-checking the bibliographies to capture relevant literature that was not identified in the internet-based search.

**Step four**

Using the evidence base developed in step three, we synthesised the literature and drew out policy insights. This step involved describing the characteristics of the literature and identifying the main findings and research themes. Based on explicit findings from particular publications and the synthesis of the literature, policy insights were identified that reflected the themes and ALAC's specified interests.

**Step five**

Our final step was to compile the report. This included documenting the evidence base, giving an overview of the literature's findings and its limits, and outlining the policy insights drawn from the literature. This step also involved arranging feedback from ALAC on a draft of the report.

## 4. DESCRIPTION OF SEARCH RESULTS

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This chapter describes the main characteristics of the publications and the categories of information obtained from the literature review.

The initial search identified approximately 160 potentially relevant publications. This set of publications was rationalised to a set of 51 publications on the basis of relevance and coverage of the topics of interest. Of these, 45 were acquired and assessed.<sup>1</sup>

The types of literature reviewed varied from studies that were tightly focused on single interventions or settings through to wide-ranging reviews of treatment programmes, research or literature. Although substantial pieces of research may have had several elements, the papers tended to fulfil one of the following functions:

- Literature review.
- Overview of types of intervention or programme.
- Reported on specific programmes.
- Carried out and reported a survey.
- Carried out a formative (process) or summative (outcome) evaluation.
- Descriptive or opinion pieces, based on experience or expertise.

Several papers also made recommendations for improving interventions or programmes.

### 4.1 COUNTRY OF ORIGIN AND DATE

The majority of the literature (59%) was on interventions in the US. This was sourced primarily from bibliographic databases. A large proportion (24%) of the results were of New Zealand origin, reflecting the search's interrogation of New Zealand government and research organisations. The few results for Australia (6%) and Canada (6%) resulted from searching specific AOD-related organisations, while one relevant study was found from the United Kingdom.<sup>2</sup> One report assessed treatments in both the US and Canada, while another evaluated 291 programmes in the US and other English-speaking countries over the previous 40 years (92 of the programmes involved drug offenders).

The search targeted literature that was less than ten years old, that is, literature published in or after 1996. Foundational work and work that was relevant but was not represented in the newer literature were also included. Only 33 publications of the set of 160 potentially relevant publications (or 21%) were more than ten years old. Nine of the 51 (18%) relevant publications were more than ten years old, and over half (59%) of the articles had been published in the previous five years. This suggests that the majority of published work on this topic has occurred recently.

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<sup>1</sup> Full copies of six publications could not be acquired in time for assessment and review; these publications are listed separately in the bibliography.

<sup>2</sup> The search did not cover specific research centres for the United Kingdom.

## 4.2 JUSTICE SETTINGS

The search yielded publications on interventions through a range of justice settings. The following list describes how the review organised the settings.

1. Before offending.
2. Screening/Assessing people for AOD dependence after entering the justice system.
3. Supervision of offenders in the community without detention.
4. Police settings involving detention.
5. Courts.
6. In prison.
7. Aftercare.

Most publications concentrated on interventions in a particular setting or examined the passage from intervention in one stage to a subsequent stage. A small number of publications looked at intervention through an entire justice system.

A number of papers explicitly considered the role of coercive, or mandated, treatment. A Canadian paper considered the Canadian experience with the application of mandated treatment (Mugford and Weekes 2006). Farabee et al (1998) reviewed 11 published studies examining the effectiveness of mandatory treatment. They concluded that there was overall support that coerced clients do as well as, or better than, voluntary clients in and after treatment, but some studies they reviewed showed no or negative effects. Inconsistencies were generally explained by variation in the legal pressure applied, the range of conditions and treatments, and differences in outcome measures.

Miller et al (2000) reviewed clinical research with the aim of testing the hypothesis that coercion is fundamental to addiction treatment and delivers favourable outcomes. The review found evidence of treatment effectiveness across justice settings from non-criminal to those in prison and indicated that coercion was a significant factor in engaging and sustaining offenders in treatment.

Young et al (2002) looked at four mandatory programmes in New York City. They stated that retention of the person in treatment is a key measure and the best predictor of long-term success. They found coercive programmes were more effective than non-coercive programmes. They concluded that research identifying elements that enhance retention, or conversely reduce risk factors for dropout, can be used by practitioners to improve existing programmes and develop new, more effective treatment models.

Lattimore et al (2004) reported on the Juvenile Breaking the Cycle (JBTC) programme in Oregon State, US, for youth offenders at high risk of AOD abuse. The programme was compared with existing treatments for juveniles at low risk of AOD abuse that involved less coercive elements. This report provided the results of the JBTC evaluation, including those from the process evaluation, the outcome evaluation and the cost-effectiveness evaluation. Sanctions, incentives and rewards were used to punish negative behaviours and encourage positive behaviours. In addition to increased treatment access, reduced drug abuse and reduced criminal behaviour, follow-up interviews suggested that the JBTC may have improved school outcomes and family relationships for participants.

A literature review by Hussain et al (2005) noted evidence from Project MATCH Research Group (1997) on matching individuals to particular treatments. It showed that treatment matching is effective for people in criminal justice settings, as these settings help to engage offenders in treatment, while treatment matching for general populations may not significantly improve outcomes.

### 4.3 TYPES OF INTERVENTION

The literature showed a range of interventions within a particular criminal justice setting. The review concentrated on interventions in early stages of a criminal justice system, but included some publications on later-stage interventions. As such, the types of later stage intervention may not be fully represented in this review.

The following table outlines the types of intervention identified by the review, according to whether the intervention is for youth or for adults. The list broadly corresponds to the stage at which an intervention occurs, but also includes interventions that may occur across several settings.

<b>Interventions for youth</b>	<b>Reference</b>
Screening and assessment	Lattimore et al 2004, Prichard et al 2005
Warnings to arrestees	Robertson et al 2004
Brief, community-based interventions including counselling	Inciardi et al 1997, White et al 2002, Belenko et al 2005, Prichard et al 2005, White et al 2006
Diversion programmes	Kingi et al 2003, Robertson et al 2004, Peters et al 2005, Thomas 2005, Aos et al 2006
Family group conferences <sup>3</sup>	Kingi et al 2003, Maxwell et al 2004, Robertson et al 2004
Youth (drug) court	Riehman et al 2003, Maxwell et al 2004, Carswell 2004, Eardley et al 2004, Robertson et al 2004, Searle et al 2006

<b>Interventions for adults</b>	<b>Reference</b>
Counselling – community-based and in prison	Whitney 1992, Budd 2002, Schwebel 2002, Harrison et al 2003, Prichard et al 2005, Sacks 2004, Canadian Centre on Substance Abuse nd
Screening/Assessment	Shearer et al 1999, Wish et al 2002, Lattimore et al 2004, Lapham 2005, Peters et al 2005
Substance abuse education – community-based and in prison	Whitney 1992, Jamieson 1994, Harrison et al 2003, Thomas 2005
Brief interventions	White et al 2006
Diversion programmes	Andrews et al 1990, Peters et al 2005, Thomas 2005, Aos et al 2006
Drug court	Belenko 2001, Logan et al 2001, Spohn et al 2001, Bouffard et al 2004, Belenko et al 2005, Aos et al 2006
Treatment readiness assessment	Czuchry et al 2000, Mugford et al 2006

<sup>3</sup> Family group conferences are an early intervention for young offenders. They do not fall within the search parameters as they do not specifically target AOD abuse with clinician interventions. The New Zealand literature indicates, however, that family group conferences are widely used. They can identify risk factors in early stages of involvement with a criminal justice system and therefore may be effective in avoiding the development of (worse) substance abuse and criminal behaviours. For example, family group conferences may divert young offenders from custody if they are detected early enough in their offending patterns (Kingi et al 2003).

Treatment planning/matching	Hussain et al 2005, Peters et al 2005
Harm reduction	Thomas 2005
Coerced treatment – community, prison and aftercare	Andrews et al 1990, Farabee et al 1998, Miller et al 2000, Mugford et al 2006
Motivational enhancement therapy	Harrison et al 2003, Hussain et al 2005
Cognitive-behavioural therapy	Harrison et al 2003, Hussain et al 2005, Aos et al 2006, Canadian Centre on Substance Abuse nd
Therapeutic Communities	Inciardi et al 1997, Czuchry et al 2000, Hills 2000, Keyser et al 2002, Young et al 2002, Harrison et al 2003, Messina et al 2004, Sacks et al 2004, Peters et al 2005, Aos et al 2006
Release planning	Whitney 1992, Sacks et al 2003
Probation, parole and residential treatment facilities	Andrews et al 1990, Inciardi et al 1997, Falkin et al 1999, Young et al 2002

## 4.4 LITERATURE ON SPECIFIC POPULATIONS

This section introduces publications and references to specific groups that are affected by problematic use of AODs. The findings of publications that do not refer to specific interventions, such as needs surveys of youth with AOD problems, are included in this section. Findings on specific interventions are presented in section 4.5 Evaluation and evidence for success.

The literature search included a specific criterion to identify interventions for adults and youth. Almost three-quarters of the relevant literature was on interventions for adult offenders (35 publications). The remaining quarter of the results included information about youth interventions, including a recent Australian survey of the demographic characteristics and risk factors of almost the entire population of juvenile detainees (Prichard et al 2005). Youth interventions included settings prior to criminal offending, such as treatment involving the family or general practitioner (GP), police settings, diversion, youth courts and juvenile detainment facilities. One study of New Zealand prison inmates also discussed matching treatment for young inmates (Whitney 1992).

### 4.4.1 Youth

Prichard et al (2005) showed that more Australian juvenile detainees entered treatment because of court orders (47%) than due to personal choice (35%), with a few offenders entering treatment during detention or due to police diversion. Based on the results of their survey, the authors recommended early intervention for juveniles, and at early ages, to avoid risk factors developing and risky behaviours worsening.

Robertson et al (2004) undertook a feasibility study of evaluating five New Zealand programmes involving police that were aimed at helping youth at risk of offending. Youth ranged from some with no history of offending to youth with an extensive list of prior offences. This study examined police responses to youth referred from Police Youth Aid, called Youth Development Programmes. Responses included warnings, diversionary plans, family group conference referrals and Youth Court charges. As a feasibility study, it did not make any findings about treatment effectiveness. It identified specific issues that a New Zealand evaluation study of Youth Development Programmes should address, such as defining appropriate comparison groups.

White et al (2006) examined two brief interventions for mandated US college students who had been caught abusing AODs. This study compared a brief motivational interview intervention with a written feedback-only intervention.

White et al (2002) examined outpatient treatment of cannabis-involved youth. Treatment included both brief interventions and long-term community-based interventions. This paper found that:

- substance abuse was usually linked with other problems;
- severity increased the younger people began abusing substances; and
- youth tended to cycle through abuse and recovery, especially in the first 90 days of treatment.

Lattimore et al (2004) reported on a diversion programme for youth involving several agencies that aimed to break the cycle of juvenile offending. Following a police encounter, youths were screened for substance involvement and either turned over to the Oregon Department of Youth Services or cited and released. Referred juveniles were assessed and placed into either standard treatment programmes or the more coercive JBTC.

Three recent publications examined the use of the Youth Drug Court in Australia and New Zealand. New Zealand research by Carswell (2004) and Searle et al (2006) reported evaluations of the Christchurch Youth Drug Court pilot. This pilot involved referring offenders before the Youth Court to a Youth Drug Court. The Youth Drug Court used a diversionary approach and aimed to identify substance abuse problems and coordinate treatment, including family group conferences. Eardley et al (2004) reported the results of an evaluation of the New South Wales Youth Drug Court programme, which involved diversion to intensive case management.

Whitney's (1992) survey of New Zealand prison inmates' substance abuse treatment needs found that eight out of ten male inmates aged less than 20 years were less likely to have discussed or received help than older male inmates. The survey report noted some comments by prison staff "that younger inmates could benefit from working with their peers, away from older inmates and have programmes that were aimed more at their age group". Suggested programmes included structured, individual programmes and "positive alternative choices of recreational time".

The search identified a number of New Zealand newspaper articles on youth justice. These articles, however, were not relevant to this search due to the lack of information about AOD treatment. The articles identified a range of potential intervention settings including:

- police involvement with youth centres "to support young people and discuss their problems, such as bullying, drugs or alcohol" (*The Evening Post* 2000);
- youth held temporarily in police cells (*The Press* 1997, *The Dominion Post* 2005, *The Press* 2005b, *The Press* 2006);
- youth drug courts (*The Press* 2002b)
- an equivalent to home detention (*The Press* 2005a, *The Southland Times* 2005);
- secure youth justice facilities in Auckland, Palmerston North and Christchurch (*The Evening Standard* 1999, *The Press* 2002a, *Manawatu Standard* 2004, *The Press* 2004, *Waikato Times* 2005c); and

- transitional arrangements between residential facilities and the community including supervision (*Waikato Times* 2005a).

#### **4.4.2 Gender**

Few papers specifically analysed gender-related issues. Sacks (2004) analysed interventions for women and Sacks et al (2004) analysed interventions for men. Both studies involved offenders with co-occurring disorders in US prisons. Sacks (2004) outlined a range of gender-specific needs and co-occurring disorders common amongst US female inmates. Differential needs related to relationship skills with their children and significant others, education and employment skills which affected their financial independence, and physical and sexual health issues. This study suggested that Modified Therapeutic Community programmes that integrate treatments for special needs and co-occurring disorders may provide better outcomes, and pointed to other Modified Therapeutic Community studies, although those studies did not specifically evaluate the impacts for women.

Belenko et al (2005) briefly reviewed a cost benefit study of specialised care for pregnant or parenting women compared with standard residential care for the same target population. It noted measured outcomes included medical and psychiatric problems, medical and psychiatric care, employment, and days engaged in illegal activities. Both programmes had benefit-cost ratios greater than 1. The standard programme, however, was cheaper but had a higher BCR.

Jamieson (1994) is a descriptive paper on substance abuse education in two New Zealand prisons – Auckland Prison West and Auckland Prison East. The programme involved male prison inmates and a female facilitator, but did not otherwise explicitly consider the role of gender. The paper describes the programme, and its operation. However, the paper does not evaluate the programme.

An earlier survey of New Zealand inmates' substance abuse needs by Whitney (1992) found little support for programmes to be led by specific genders, or for participants to be of a particular gender. Riehmman et al's (2003) analysis of US youth drug courts showed girls and boys can have very different experiences and histories in a criminal justice system.

Wish et al (2002) analysed two screening tools for cocaine and heroin dependence among arrestees. This paper compared the screening tool from the Diagnostic and Statistical Manual of Mental Disorders, third edition-revised (DSM-III-R) and the Center for Substance Abuse Research Arrestee Drug Screener (CADS) interview. CADS is a reduced form, which approximates the diagnosis of the full DSM-III-R. The study compared sensitivity and specificity rates of the tools for men and women.

#### **4.4.3 Ethnicity**

The search results did not identify ethnicity as a commonly researched dimension of substance abuse treatment. Prichard et al (2005) considered ethnicity in their demographic analysis of substance-abusing juvenile detainees. Whitney (1992) found some, but not widespread, support for culturally sensitive interventions. Jamieson's (1994) study of substance abuse education programmes in the New Zealand prison system was based primarily on Māori inmates in Auckland prisons, but also included some analysis of intervention design for Polynesian offenders.

## 4.5 EVALUATION AND EVIDENCE FOR SUCCESS

The literature shows that a range of outcomes is sought from substance abuse treatment. Much of the literature describes interventions and programmes or discusses substance abuse and its treatment. Few studies set out to test or evaluate treatment success. Therefore much of the evidence base describes the range of interventions or gives anecdotal information about an intervention's effects rather than robustly evaluating effectiveness.

Aims of early interventions noted in the literature include:

- problem identification by the criminal justice system;
- problem recognition by the offender;
- heightening motivation to seek treatment;
- targeting risk factors to prevent or reduce substance abuse becoming more serious; and
- treating problems before they become more serious.

Screening youth (discussed in section 4.4) and adult offenders for drug dependence is used in a range of criminal justice settings.

Wish et al (2002) evaluated two methods of screening (CADS and a reference standard tool) for cocaine and heroin dependence amongst US arrestees using sensitivity and specificity measures.<sup>4</sup> Data from the three sites showed CADS had very high sensitivity for both cocaine and heroin dependence (97%-100% for both tools, with slight differences between genders). There was greater specificity for women than for men for measuring cocaine and heroin dependence with CADS. For example, the cocaine screener was 77% specific among females but 66% among males. The heroin screener was 67% specific among females and 61% specific among males.

Lapham (2005) examined screening for alcohol misuse in the US criminal justice system, which was combined with brief intervention to break the abuse/crime cycle. This paper reviewed literature on how alcohol contributes to criminal behaviour through physiological and environmental factors, but did not provide evaluation research findings. It made several recommendations, but it is unclear whether these recommendations were drawn from the underlying evaluation research or were the author's conclusions from reading the literature. The paper concluded that there were limitations to screening procedures in the US criminal justice system. These included a lack of instruments specifically designed for criminal justice offenders, that the tools usually relied on self-report and that this may have been inappropriate for screening involving coercion, such as court-mandated tests.

Shearer et al (1999) reviewed types of screening and assessment tools for offenders in criminal justice settings who had substance abuse disorders. This paper also considered treatment readiness screening tools. It highlighted that early identification of problems and encouraging treatment readiness were important in terms of minimising harm and overcoming established problems.

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<sup>4</sup> Sensitivity measures true positives, that is, the percentage of all persons with the condition who are correctly identified as having the condition based on the reference standard. Specificity measures true negatives, that is, the percentage of all persons who are correctly identified as not having the condition based on the reference standard. An accurate test is both sensitive and specific.

Lattimore et al (2004) used a quasi-experimental design to evaluate a youth diversion programme. The study statistically controlled for selection biases and reported the treatment group were more likely to have access to substance treatment, reduced drug use and reduced short- and long-term arrest rates. The JBTC intervention was more expensive than for youths who were not in the JBTC group, primarily due to greater treatment and detention.

There are a large number of studies of the effectiveness of youth drug courts (discussed in section 4.4) and adult drug courts, particularly in the US. These interventions represent a form of 'therapeutic jurisprudence', where court processes and, in particular, the role of the judge can be used to facilitate treatment processes. These evaluations provide a substantial body of evidence for the effectiveness of these programmes, comparing before-and-after outcomes and outcomes for completion/non-completion.

Examples of adult drug courts include Spohn et al (2001), who reviewed drug courts in Nebraska, Logan et al (2001), who evaluated three Kentucky drug court programmes, and Bouffard et al (2004), who provided a process evaluation of four adult drug courts in the US. Logan (2001) showed that offenders who terminated treatment before programmes were complete were more likely to re-offend than those who completed treatment. This paper also statistically controlled for ethnicity, gender and age differences according to participation, but found no significant differences in terms of incarceration during the programme or post-programme re-offending.

Belenko (2001) gave a wide-ranging assessment of drug courts by drawing on the findings of a series of evaluations. This paper reached broad conclusions on the basis of 37 published and unpublished evaluations. The majority of these evaluations found lower rates of recidivism for drug court participants.

The evaluations of the Christchurch Youth Drug Court pilot found lower rates and seriousness of offending by the pilot participants compared with levels before entering the Youth Drug Court (Carswell 2004, Searle et al 2006). Similarly, Eardley et al (2004) found 'graduates' of the New South Wales Youth Drug Court programme were less likely to re-offend than those who did not complete the programme and were more motivated to reduce their drug use than those who terminated from the programme.

White et al's (2006) evaluation of two brief interventions for US college students found the programmes decreased AOD abuse. It found no significant outcome differences between the two, and therefore found written profiles to be more cost effective as they took less time and personnel.

White et al's (2002) outpatient Cannabis Youth Treatment study found that treatments that targeted the community environment and post-treatment monitoring both improved success rates. It also found that brief interventions were more likely to be successful for acute substance abuse than for chronic cases.

A number of publications concentrated on interventions specifically in prison settings. These included initiatives to keep prisons drug free (Keyser 2002), cooperation between police and prisons to control and detect drug importation (Whitney 1992), what drug treatments were available (Jamieson 1994, Harrison 2003) and what drug treatments appeared to be most effective in the prison context (Harrison

2003). Whitney's (1992) survey of New Zealand prison inmates reported that the best timing for assistance was on entry (half of the respondents) or after settling down (one-third), with only one-tenth of inmates considering just before release as appropriate. This survey also noted that transfers between prisons during an inmate's sentence interrupted treatment, which respondents felt had a negative impact on treatment effectiveness.

Hussain et al's (2005) literature review found research evidence on the effectiveness of interventions for prison inmates, including treatment matching, motivational enhancement, social/coping skills training and cognitive-behavioural treatment. Based on its findings the authors concluded that treatment matching and treatment could be more effective in a criminal justice setting than for a general population in a non-justice setting. They supported the use of all four interventions named above for offenders, and also indicated that offenders with AOD problems benefited from longer-term treatment (approximately one year).

Treatment readiness assessment, treatment matching, education, counselling and a range of therapies focus directly on the effects of substance abuse, and aim for abstinence or better management. These tools may be used at a range of stages in a criminal justice system. Czuchry et al (2000) evaluated a treatment readiness programme for prison inmates in Therapeutic Communities. The programme was designed to increase motivation and improve skills needed for treatment progress. The findings of this evaluation are discussed below, along with other interventions delivered in Therapeutic Community settings.

Harrison et al (2003) reviewed US evidence on a range of treatments offered in prison settings. They found little or no evidence for the effectiveness of education, counselling and group work. They pointed to evidence of the effectiveness of therapeutic interventions such as facilitation (12-step programmes), behavioural programmes and motivational interviewing.

Direct interventions may also target health outcomes such as harm minimisation. Harm minimisation interventions aim to minimise the health effects of substance abuse and its associated risks but do not necessarily aim to reduce or prevent substance abuse (Thomas 2005).

There is a substantial body of evidence pointing to the effectiveness of Therapeutic Communities. These interventions involve isolating offenders, either in prisons or community-based facilities, and emphasise the role of the entire community in the treatment process.

Peters et al's (2005) wide-ranging best-practice guideline for the treatment of substance abuse disorders concluded that Therapeutic Communities were among the most successful in-prison treatment programmes. It defined Therapeutic Communities as "highly structured, hierarchical, and intense interventions lasting a minimum of 6 months. Therapeutic Community participants live together, often separate from the general prison population, and take responsibility for their recovery process." The authors point to surveys in the Drug Abuse Treatment Outcome Survey (Melnick et al 1999, De Leon 2000,) that showed high levels of agreement among Therapeutic Communities as to the nature of the essential treatment elements. These elements include the treatment approach, the role of the community as a therapeutic agent, the use of educational and work activities, the formal elements of Therapeutic Community treatment, and the Therapeutic Community process.

Inciardi et al (1997) considered a three-stage system of treatment – incarceration involving a Therapeutic Community, work release, and parole. Each stage was calibrated to the justice client's changing correctional status. This evaluation of Therapeutic Communities showed that treatment benefits could be sustained beyond an in-prison programme and that the longer clients remained in treatment the less likely they were to be rearrested or returned to prison.

Czuchry et al (2000) showed some evidence that people in a treatment readiness programme within a Therapeutic Community were more engaged in the community and respectful of others. Although dated and descriptive, Whitney (1992) points to encouraging evidence on the role of specialised AOD treatment units in New Zealand prisons. The report devotes seven pages to quotes from, and analysis of the views of, inmates and prison staff on support for such units. This review found the inmates surveyed were “keen to try such a unit”, and the majority of prisons supported the concept with few reservations.

Young et al (2002) is a comparative analysis of four community-based Therapeutic Communities that aimed to encourage pro-social behaviour and drug abstinence. This study's measure of success was retention in a Therapeutic Community programme, but the paper did not report on substance abuse or criminal behaviour outcomes. It found that all Therapeutic Communities resulted in better treatment engagement and pro-social behaviour, such as respect for others.

Modified Therapeutic Communities have been used for offenders with co-occurring disorders, such as mental health disorders. The effectiveness of Modified Therapeutic Communities in a prison setting has been evaluated (Messina et al 2004). Using one-year return to custody as a measure of performance, this study supported a Modified Therapeutic Community approach for co-disordered offenders.

Sacks et al (2004) analysed outcomes for offenders with Mental Illness and Chemical Abuse disorders who were allocated to either Modified Therapeutic Communities or mental health treatment programmes. The results showed that the Modified Therapeutic Community group had significantly lower rates of AOD-related criminal behaviour and re-incarceration. They note, however, that the study did not control for differences in motivation between these groups, and that these differences could obscure the relative effects of the programmes.

Later-stage treatments include supervision, outpatient treatment and treatment in specialised residential facilities. Neither intensive supervision nor outpatient drug treatment are successful for all types of offender, but there is evidence that outpatient drug treatment programmes are effective for probationers who do not have severe drug abuse problems (Falkin et al 1999). Falkin et al (1999) also showed that offenders who stayed in outpatient drug treatment longer than 90 days were significantly less likely to offend again than those who dropped out earlier.

In addition to AOD outcomes, the literature reflects criminal justice objectives. Treatment outcomes include successful reintegration to the general community and reducing future offending. These types of outcome tend to be associated with later-stage interventions and aftercare. Such outcomes fall beyond the main scope of this review and literature on this topic was not analysed in detail. An example, however, is Aos et al's (2006) report *Evidence-Based Adult Corrections Programs: What*

*Works and What Does Not.* It examined 291 programmes in the US and other English-speaking countries and assessed their effectiveness in terms of reducing recidivism. This paper was useful in describing a range of interventions, including 92 interventions for AOD problems, but the primary outcome measure focused on crime prevention rather than substance abuse.

## 5 THEMES IN THE LITERATURE

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This chapter outlines the main themes in the literature described in chapter 4, where the findings of specific papers were reported. The analysis in this section treats the literature as a body of work in order to provide an overview of its findings.

### 5.1 STAGE OF THE JUSTICE SYSTEM WHEN INTERVENTIONS ARE APPLIED

A number of studies look at intervention through the criminal justice system as a whole. The Canadian Centre on Substance Abuse (nd) prepared an overview of offenders and treatment approaches in the Canadian criminal justice system. Aos et al (2006) gave a large-scale review covering 92 drug treatment programmes that ranged across justice systems for English-speaking countries and aimed to determine what was effective. The study looked at rigorous evaluations of drug courts, treatment in prison and the community. Belenko et al (2005) looked at the cost effectiveness of treatments throughout the criminal justice system.

Youth-focused literature often examines interventions prior to offending, or before significant criminal offending. Two studies found that abuse severity increased the earlier younger people began abusing substances (White et al 2002, Prichard et al 2005). Based on these findings the studies recommended screening to identify risk factors that would allow early intervention. The logic of such intervention was that it would identify existing problems, but would also avoid more serious risk factors developing. A number of studies found diversion was effective in reducing substance abuse amongst youth. There is some evidence that less intensive written feedback is equally as effective as motivational interviews and is less resource intensive.

Screening and assessing adult offenders for drug problems is used in a range of criminal justice settings (Shearer et al 1999, Wish et al 2002, Lattimore et al 2004, Lapham 2005, Peters et al 2005). Arrestees and inmates are screened for substance abuse problems as well as to identify treatment readiness. Screening is argued to be an important part of the treatment process as it can identify problems, encourage treatment readiness and allow appropriate treatment matching (Lapham 2005). This can improve treatment success and avoid creating negative outcomes (Rice 1997, Shearer et al 1999). There is some evidence that screening has lower accuracy than more intensive assessment processes, and that care is required in evaluating the relative cost-effectiveness of screening (Shearer et al 1999).

Drug courts have become a common form of intervention involving therapeutic jurisprudence. New Zealand and Australia have Youth Drug Courts, while states in the US provide both youth and adult drug courts. These interventions involve various degrees of treatment intensity and coercion, and tend to divert offenders from criminal detainment to community settings or secure residential facilities. These interventions are primarily defined by offenders being channelled through a dedicated court system, but involve a range of AOD interventions. It is unclear that drug courts necessarily involve AOD clinicians, but the publications reviewed for this search involving specific interventions did include some clinical input.

The literature provides a substantial body of descriptive and evaluative evidence about drug court approaches for youths and adults. The weight of evidence indicates that drug courts are effective in promoting treatment and reducing substance abuse and criminal behaviour. One paper questioned the effectiveness of drug courts in promoting abstinence as one type of outcome for youth.

Prison-based interventions include keeping prisons drug free, assisting with drug management and abstinence while in a general prison population, and the use of specialised, isolated treatment units. The evidence on prison-based interventions indicates that treatment is more successful where the treatment is designed for the offenders' individual and environmental characteristics. This includes allowing for age, ethnicity and co-occurring disorders such as mental health problems.

The literature also finds that treatment in prison settings can be more effective than in the community because the setting could improve problem identification, treatment readiness and engagement in the treatment process. The literature indicates that young offenders may benefit more from individual treatment, while adult offenders may benefit from group treatment.

Later-stage treatments include supervision, outpatient treatment and treatment in specialised residential facilities. These treatments often focus on supporting a person during their transition from prison to the community, and take into account environmental factors that influence substance abuse. While pre-prison interventions may target both an offender's personal characteristics and their environment, in-prison treatments create an artificial environment.

Where treatment is designed to fit with the offender's time in prison, the prison environment can deliver successful outcomes. The literature covers a range of treatment outcomes. These include behavioural changes such as showing others respect and reductions in AOD problem use, re-offending and reconviction.

Sustaining outcomes from treatment in prisons, however, can depend on designing treatments that are appropriate for a person once they are removed from the artificial prison environment and returned to a community environment (Inciardi et al 1997, Falkin et al 1999, Young et al 2002). Support and treatment planning is a particularly important component of sustaining outcomes over the long term for people with co-occurring disorders, due to the more complex nature of their needs.

## **5.2 DURATION OF INTERVENTION**

The duration that offenders attend interventions is widely mentioned as a critical success factor. The analyses of duration focus on the:

- planned length of the duration, for example brief or long term;
- connection of interventions into a programme of treatment, for example prison-based care followed by community-based aftercare;
- effects of failing to complete an intervention; and
- intensity of a duration (for example, the number of hours per week spent in treatment).

A number of publications examine brief interventions, particularly in non-custodial criminal justice settings (Inciardi et al 1997, White et al 2002, Prichard et al 2005, White et al 2006). In part, the use of

brief interventions over longer interventions appears to reflect lower engagement by offenders as they are not removed from the environment in which offending and substance abuse occur. Brief interventions have been found to be effective for acute substance abusers and deliver long-term benefits, but chronic abusers may be less responsive to brief outpatient or residential interventions.

Longer duration treatments in community settings are evident in the literature, including diversion. In the evaluation of the Christchurch Youth Development Court pilot, although treatment occurred in a community setting, the length of time an offender attended the Youth Development Court varied greatly from 5 to 74 weeks, with the median being 45 weeks.

Involvement in a criminal justice system can help to engage offenders in a treatment process. Longer prison terms may allow treatment to be calibrated to an offender's treatment progress and changing correctional status (Inciardi et al 1997). Prison-based programmes can last for several months, while some run for more than a year. There is an evidence base that shows offenders with AOD problems benefit from longer-term treatment of around one year (Hussain et al 2005).

Consistent with this finding and the arguments in the screening literature, the literature suggests that treatments that begin on, or shortly after, arrival at prison improve treatment success (Whitney 1992, Wish et al 2002, Lattimore et al 2004, Lapham 2005, Peters et al 2005). One New Zealand publication was concerned that prison transfers, which interrupt treatment programmes, could prevent treatment progress (Whitney 1992).

The literature indicates that better outcomes can result from treatment programmes that combine treatment in prison with aftercare. Offenders who have longer durations of outpatient drug treatment are less likely to re-offend. Longer duration in aftercare also allows a client to assess their progress and gradually to assume greater independence as they become able to manage greater responsibility.

An issue that is related to duration of treatment is completion of a treatment programme. The literature shows that completing treatment programmes is important to perceptions of treatment success, motivation and outcomes such as reduced re-offending rates. Many evaluations have relatively short timeframes, which limits their ability to provide evidence on long-term treatment outcomes.

A number of papers provide a fine level of detail about the structure of a treatment programme, such as the number of hours per week or the number of weeks, months or years attended.

### **5.3 INTERVENTIONS FOR SPECIFIC POPULATIONS**

There is a wide range of treatments where the population of AOD abusers is heterogeneous. A number of publications examine the role of particular characteristics for these specific populations, or groups with common characteristics.

Several authors argue that a standard 'one size fits all' approach is unlikely to be effective (Whitney 1992, Jamieson 1994, Shearer et al 1999, Riehmman et al 2003, Sacks 2004, Peters et al 2005). But some papers note that particular interventions as part of a treatment programme are likely to be beneficial for a wide range of offenders (Hussain et al 2005, Peters et al 2005). Because of their

histories or life experiences, certain populations will have somewhat different treatment needs. A key factor in successful substance abuse treatment is matching clients to the appropriate treatment and modifying the treatment to meet specific client needs.

### **5.3.1 Interventions for specific adult populations**

A number of studies of adult offenders find that offenders with co-occurring serious Mental Illness and Chemical Abuse disorders respond better to Modified Therapeutic Communities than mental health treatment programmes while in prison and in aftercare (Czuchry et al 2000, Sacks et al 2004).

Two New Zealand studies have indicated that some offenders benefit from programmes that reflect cultural aspects (Whitney 1992, Jamieson 1994). One study noted that some Māori inmates felt cultural components were important in making the programme suit their needs (Whitney 1992). The other study suggested that factual education alone may suffice for ethnic groups, noting Pakeha as an example. Some Maori and Polynesian offenders might respond better to treatment programmes that combine education, counselling, aftercare support and treatment, and family involvement (Jamieson 1994).

There is little evidence that the gender of a programme leader or participants in prison is important. One study highlighted that structured, individual programmes were better for young offenders, although it was not clear whether this was due to the person's age or whether young people tended to be lower risk (Whitney 1992).

There is some evidence that treatment is more effective when it matches an offender's risk of criminal behaviour (Andrews et al 1990). Shearer et al (1999) found that putting a person from a low-risk population into group therapy may increase the risk of future offending.

### **5.3.2 Interventions for specific youth populations**

The bulk of literature on interventions for youth generally relates to early interventions and involves a range of objectives and success indicators. There is some evidence that treatments need to be tailored to individual characteristics (White et al 2002, Prichard et al 2005). Prichard et al (2005) identified the following themes.

- Gender may be a significant influence in the response to drug treatment by adolescents, but the evidence base is small.
- The severity of abuse increases the younger a person begins abusing substances.
- Brief interventions for youth can be more successful for acute substance abusers than for chronic cases.
- Substance abuse is usually linked with other problems and recognising these problems contributes to more effective treatment programmes.
- Youth may resist outcomes, such as abstinence, that may be easier to implement with adult populations.

Youth populations appear to respond well to diversion programmes, particularly where they involve several agencies that may address the varied and complex problems of youth offenders. For example, programmes that can also target employment and family support may promote better treatment. A New Zealand evaluation identified a lack of programmes for Māori and Pacific young people, in particular young Māori women (Jamieson 1994).

Diversion programmes involving residential care have been shown to reduce substance abuse and criminal behaviour over both short and long timeframes. Residential diversion programmes tend to be more resource intensive and therefore more expensive (Logan et al 2001). This indicates that there is a case for such interventions, but an economic analysis should be part of this case.

Young offenders in prison appear to respond better to individual treatment, while group treatment can be criminogenic, or promote criminal behaviour (Whitney 1992, Hussain et al 2005). However, the evidence is not clear whether this relationship results from age or from an offender's risk of substance abuse/crime. Young offenders may be at lower risk of substance abuse and criminal behaviour and therefore the effect may result from the relationship with their risk profile rather than their age.

#### **5.4 LINKAGE WITH OTHER DISORDERS**

The prevalence of co-occurring disorders among offender populations is consistently higher than among those of the general population. Co-occurring disorders, such as mental health disorder or dysfunctional family relationships, may be the norm rather than the exception for prison populations. There is a body of evidence that treatment of individuals with other disorders should integrate treatment for the range of problems (Czuchry et al 2000, Sacks et al 2003, Sacks 2004, Sacks et al 2004). For example, studies looking at the effectiveness of Modified Therapeutic Communities for offenders with co-occurring disorders conclude that the approach is beneficial. However, the effectiveness of Modified Therapeutic Communities can depend on the accuracy of diagnostic assessments.

One set of work emphasises that failing to identify some conditions can not only lead to ineffective treatment but may result in negative outcomes (Rice 1997, Shearer et al 1999). For example, while Therapeutic Communities are widely held to be effective, a psychopath<sup>5</sup> treated in a Therapeutic Community may experience a higher risk of future violence.

#### **5.5 MANDATORY VERSUS VOLUNTARY**

A substantial body of work considers the impacts of coerced, or mandated, treatment (Farabee et al 1998, Wexler 2000, Young et al 2002, Mugford et al 2006). The terms mandated and coercive treatment are used in a variety of ways. They cover situations ranging from where little legal pressure is applied to where the person has no choice over accepting treatment. Examples include diversion programmes where a person is offered treatment or some other type of sanction, a choice between treatments, treatment as part of their management in detention, or is placed into treatment. These publications analyse the relative impacts on treatment outcomes, implementation issues and ethical dimensions.

This set of literature demonstrates that a range of treatments in criminal justice settings is effective, but more importantly that coercing offenders into treatment can deliver better outcomes than relying on self-referral processes. In particular, the literature highlights that coercion may:

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<sup>5</sup> Psychopathy is used in the literature as a technical term. It refers to an extreme version of antisocial personality disorder, where a person suffers from a desire to cause others harm and violent tendencies. A short introduction distinguishing antisocial personality disorder, sociopathy and psychopathy may be found at <http://faculty.ncwc.edu/toconnor/428/428lect16.htm>.

- lead to (earlier) problem identification;
- prepare offenders for treatment;
- engage offenders in treatment programmes; and
- sustain treatment efforts in a variety of settings.

## 6 IMPLICATIONS FOR POLICY

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This chapter provides policy insights based on explicit findings from particular publications and the synthesis of the literature. The insights are organised according to the three content areas of the conditions, the interventions and the settings. Where relevant a separate analysis of insights for youth populations is included.

Overall, the literature search found a body of recent literature that indicates a growing interest in evidence on specialised AOD treatment in justice settings among researchers, policy makers and the public. This interest indicates that it is timely to consider how this evidence base is used and developed so that it is relevant to New Zealand.

### 6.1 THE SETTINGS

Specialised AOD interventions are provided in a range of justice settings and have been shown to be effective.

The literature emphasises screening and assessment for AOD abuse and treatment readiness. These interventions may be used in a range of settings and can be cost effective in terms of avoiding more serious problems developing or mismatching offenders to treatments. Owing to the complex characteristics of offenders, however, the accuracy of screening tools may lead to questionable effectiveness, particularly for identifying psychopathy.

A number of publications, especially those relating to young people, show that early intervention programmes can be effective in managing AOD abuse and can prevent the development of risk factors leading to more severe AOD abuse and deeper involvement in the criminal justice system. Examples of early interventions include police involvement with community youth centres, screening/assessment, brief interventions by GPs or counsellors, and diversion programmes such as youth or adult drug courts.

For offenders serving prison sentences, the literature supports intervening early in the inmate's term. This intervention, however, generally involves an ongoing programme of treatment rather than brief or episodic treatment. A number of publications judge that Therapeutic Communities are the most effective type of intervention for prison inmates. Therapeutic Communities are isolated treatment units that treat AOD abusers with identified problems. These interventions influence both individual and environmental factors. As a community support system, Therapeutic Communities may also contribute to better re-integration into the general community.

There is good support for post-prison treatment. Aftercare programmes can complement prison treatments. They can sustain treatment in a community setting, improve re-integration to the general community and reduce AOD abuse and criminal behaviours.

A set of publications specifically considers the role of treatment coercion provided by involvement with the justice system. Coercion involves the use of legal pressure to encourage offenders to seek treatment for their AOD abuse. The evidence supports the use of coerced treatment compared with

voluntary treatment. This finding is particularly relevant for people involved in justice settings that typically involve coercion and sanctions.

A number of publications show that interventions can be effective, or more effective, for people involved with the criminal justice system than for AOD abusers in the general community. The literature finds that coercion can be useful in promoting problem recognition, treatment readiness and engaging in treatment. Coercion can also be used in a programme of treatment that influences the offender's environment as well as their individual incentives, thereby increasing the effectiveness of a particular intervention and the duration spent in treatment.

Few studies address the issue of increasing the intensity of coercion within a particular setting. In diversion settings, there is some evidence that greater coercion improves treatment outcomes. This finding appears to depend on the higher level of support and treatment provided within these programmes, rather than greater pressure alone.

## **6.2 THE CONDITIONS**

The literature describes a range of factors that influence AOD abuse and involvement with the criminal system. These influences may be categorised as individual and environmental factors. There is evidence that matching treatment to a person's characteristics and environment can improve treatment outcomes for those involved in a criminal justice system.

Three individual factors that influence risk and assistance-seeking are age, ethnicity and motivation. There is some evidence for tailoring treatment to gender amongst young offenders, but less support for the importance of gender amongst adult offenders. In addition to risk factors for substance abuse, the literature finds that substance abusers tend to have a range of problems. This means treatment may be more effective when it involves a range of agencies, targets the individual's environment and integrates treatment rather than treating problems separately.

In the community, environmental factors include the acceptability of substance abuse, the ease of access to substances, and attitudes to, and the availability of, treatment. In prison settings, environmental factors found to influence willingness to engage in treatment are security, respect for the offender as an individual, and communication between the programme facilitator and the offender.

There is some evidence that the effectiveness of treatment depends on an offender's risk of substance abuse or criminal offending. Establishing a person's risk of substance abuse and criminal behaviour can improve treatment effectiveness. Early intervention has been found to be effective for treating low-risk abusers, for example diverting low-risk abusers to community-based interventions. More intensive interventions may have little incremental effect for low-risk abusers and may expose them to negative influences. High-risk offenders may respond better to a treatment strategy involving escalating support/sanctions, which may involve moving towards interventions that are more intensive and of longer duration and involve more coercion.

### 6.3 THE INTERVENTIONS

From a policy perspective there is considerable uncertainty around the effectiveness of AOD treatment in terms of reducing substance abuse and criminal offending. This uncertainty stems from the:

- limited body of evidence evaluating effectiveness;
- wide range of treatments for AOD dependence;
- lack of consensus on the nature of the problem;
- diversity of outcomes associated with treatment, such as reduced substance abuse or reduced criminal behaviour; and
- range of measures used to measure a given outcome.

There is some evidence around what factors promote positive outcomes. These include:

- involvement in criminal justice settings, as it can engage AOD abusers in treatment;
- screening, assessment and treatment matching, which have potential as cost-effective interventions, particularly as inappropriate treatment has been shown to be counterproductive for low-risk offenders, young offenders and psychopaths. The economic merit of these interventions depends on their expense and accuracy;
- motivational enhancement through brief interventions or counselling, which should be used for a wide range of AOD abusers;
- cognitive-behavioural treatments, which are effective and assist with problem identification, social/coping skills-training and lifestyle modification;
- social integration, which is beneficial and involves the use of community support and employment; and
- longer-term treatment (approximately one year) in the criminal justice system.

Three main insights can be drawn from the literature evaluating the effectiveness of specialised AOD interventions in criminal justice settings.

1. Treatment may be effective, but treatment is not unambiguously effective and the effects can differ across populations. There is evidence that interventions such as adult drug courts, therapies in prison and aftercare reduce recidivism. There is no evidence that interventions such as diversion work for all populations of offender. The implication is that resources should be concentrated in areas of proven effectiveness.
2. Rigorous evaluations of drug treatment are limited. Given the ambiguity of what works, and the equivocal nature of what effectiveness means, there is a case to support evaluation studies.
3. The complex nature of criminally involved substance abusers complicates the design and implementation of controlled evaluations. Therefore, evaluators may wish to take into account the following factors:
  - Clear definitions and measures of the consequences of intervention.
  - Study designs that allow for variations in offender and environmental characteristics, which may influence treatment effects.
  - Consideration of comparative economic analyses that establish relative effectiveness as well as absolute effectiveness.

## APPENDIX: SUMMARY ASSESSMENT OF PAPERS REVIEWED

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This appendix contains the reviewers' summaries for particular articles, noting salient features and assessing the articles' relevance to this literature review.

**Andrews DA, Zinger I, Hoge R D, Bonta J, Gendreau P and Cullen F T (1990) *Does Correctional Treatment Work? A Clinically-Relevant and Psychologically Informed Meta-Analysis.***

This paper is a meta-analysis of several research papers on the treatment effects of correctional services (treatments) on criminal recidivism. It identifies treatment attuned to 'risk factors' as important in delivering services that reduce criminal recidivism. However, this paper does not comment directly on the effects of the treatments on substance abuse (presumably one of the risk factors, but not directly stated). It estimates the quantitative support of the effectiveness of different types of treatment, and the direction of these effects (reducing/promoting recidivism).

This paper focuses on outcomes relating to criminality rather than substance abuse, but there is potential that the underlying papers (which fall outside the search timeframe) might address the intermediate outcomes relevant to this search, namely the effects of the treatments on risky behaviours such as substance abuse.

**Aos S, Miller M and Drake E (2006) *Evidence-Based Adult Corrections Programs: What Works and What Does Not.***

This study provides a comprehensive review of evidence-based programs for adult offenders. It is based on a simple question: What works, if anything, to lower the criminal recidivism rates of adult offenders?

The review involves systematically reviewing the evidence from 291 rigorous evaluations conducted throughout the US and other English-speaking countries during the past 35 years. Of these 291, a total of 92 programmes involved drug offenders.

Some types of adult corrections programme have a demonstrated ability to reduce crime, but other types do not. The implication is clear – adult corrections systems will be more successful in reducing recidivism rates if policy focuses on proven evidence-based approaches.

This report includes a table of findings outlining which programmes were considered effective and which were not, and areas in need of further research to make a conclusion about their effectiveness in reducing adult recidivism rates.

It covered the following programmes.

- Programmes for drug-involved offenders.
- Programmes for offenders with co-occurring disorders.
- Programmes for the general offender population.
- Programmes for domestic violence offenders..
- Programmes for sex offenders.
- Intermediate sanctions.

- Work and education programmes for the general offender population.

Programme areas in need of additional research and development: (requiring additional research before it can be concluded whether they reduce adult recidivism rates).

**Belenko S (2001) *Research on Drug Courts: A Critical Review 2001 Update.***

A critical review of 37 published and unpublished evaluations of drug courts between 1999 and April 2001. The conclusions drawn from this research are generally consistent with those of previous reviews.

Drug courts have achieved considerable local support and have provided intensive, long-term treatment services to offenders with long histories of drug use and criminal justice contacts, previous treatment failures, and high rates of health and social problems.

Programme completion rates are generally consistent with previous findings, with an average of 47% of participants graduating. Drug use and criminal activity are relatively reduced while participants are in the programme.

**Belenko S, Patapis N and French N T (2005) *Economic Benefits of Drug Treatment – A Critical Review of the Evidence for Policy Makers.***

In the US, states are increasingly moving toward performance-based contracting for treatment programmes. Findings from economic analyses can help policy makers to make more rational and informed decisions about allocating resources to different types of treatment and target populations in a more cost-effective way.

This paper is designed to synthesise, for policy makers, regulators and treatment professionals, the research findings on the economic impact of treatment, including treatment costs, cost-effectiveness analysis and cost benefit analysis. It also critically reviews the conclusions that can be drawn from the literature and summarises the key research gaps that need to be addressed.

This study is based on a systematic search identifying recent published and unpublished articles, books and government reports on the economic costs and benefits of substance abuse treatment.

**Bouffard J and Taxman F (2004) *Looking Inside the ‘Black Box’ of Drug Court Treatment Services Using Direct Observations.***

This study examines the delivery of substance abuse and allied social services in four adult drug courts, using qualitative and quantitative methodology (direct observation, traditional surveys and interviews of treatment staff). Results: improvements in several areas could enhance effectiveness, especially in the delivery of scientifically established (i.e. cognitive-behavioural) treatment approaches. An important question yet to be answered in the literature is: What is the nature of the substance abuse treatment services delivered? Also, questions about the integration of drug court services (e.g. criminal justice services such as drug testing and probation supervision) and substance abuse treatment services are unanswered.

These courts attempt to incorporate treatment principles as part of a strategy to assist offenders with recovery from substance abuse. They also provide a structured environment and monitor the progress of the offender using state-of-the-art technology, including treatment, drug testing and graduated sanctions.

Numerous summaries of the research (e.g. meta-analyses) have demonstrated the effectiveness of cognitive-behavioural therapy (CBT) approaches with various groups of offenders, including substance-abusing offenders. Not only have they demonstrated the impact of CBT-type interventions, they have also generally suggested that these approaches are more effective than other styles of intervention (such as psychoanalytic or punishment-oriented approaches).

An examination of the black box reveals that treatment in these courts is an eclectic, all-encompassing experience of sometimes compatible, yet often conflicting messages. For the offender population, which tends to be less well educated and is likely to have some cognitive and/or neurological deficits given the long-term abuse of drugs, the clarity of the treatment intervention is critical. As shown in these four drug courts, the services and their underlying assumptions are highly mixed and therefore may not provide interventions that can clearly and directly address the substance-abusing offender's behaviour. Drug treatment courts must often use the available services in the community. However, the study results suggest that more research is needed on the black box to determine if the courts are integrated with treatment providers in such a way to use drug treatment effectively to achieve reductions in recidivism.

#### **Budd, Susan (2002) Participants High on Health...**

A short report on a conference in a publication for GPs. It does not examine specific interventions relevant to this review or provide evaluation evidence.

#### **Canadian Centre on Substance Abuse (no date) *Treatment Overview.***

The Canadian Centre on Substance Abuse web-site provides an overview of Canada's correctional system. The system is two-tiered, consisting of federal offenders – those serving sentences of two years or more in federal prisons – and those under provincial/territorial jurisdiction, who serve sentences of less than two years. Within the federal system, the drug offender population comprises about one-quarter of the total offender population under federal jurisdiction.

Canada has developed a broad range of prevention, treatment and counselling services. Examination of these services indicates that most lack a solid theoretical and empirical foundation. Fewer still have undergone rigorous evaluation to demonstrate their effectiveness. Current research suggests that successful programmes focus on skill-development as opposed to more 'insight-oriented' and traditional psychotherapeutic approaches.

#### **Carswell S (2004) *Process Evaluation of the Christchurch Youth Drug Court Pilot.***

The Christchurch Youth Drug Court pilot aimed to facilitate better service delivery to young people with AOD dependency in order to reduce their offending. The formal disposition of the case is suspended until the young person successfully completes their programme or is discharged back to the Youth

Court or District Court. The Youth Drug Court is voluntary for the young people identified as suitable candidates and they can elect to go back to the Youth Drug Court at any time.

The target group is recidivist youth offenders aged 14-16 who have moderate-severe AOD dependency linked to their offending. The length of time attending the Youth Drug Court varied from 5 to 74 weeks. The second phase follows up the same young people 12 months after the pilot to examine to what extent participation in the Youth Drug Court processes contributed to any improvements in these young people's lives.

Service gaps identified were: the lack of a youth residential facility in or near Christchurch; the issue of suitable accommodation; and a lack of programmes for Māori and Pacific young people, in particular young Māori women.

**Czuchry M and Dansereau D F (2000) Drug Abuse Treatment in Criminal Justice Settings: Enhancing Community Engagement and Helpfulness.**

This study examined the impact of a treatment readiness programme on probationers receiving drug abuse treatment in a Modified Therapeutic Community. The programme was designed to increase motivation and improve skills needed for treatment progress. The study examines an eight-hour cognitively based treatment readiness training programme. Comparisons are made between probationers who receive the readiness training and those who receive the standard programme (an eight-hour lecture/discussion approach delivered during the first month of treatment) provided at the facility.

Probationers receiving the readiness training rate their communities as more engaged and helpful than do those receiving the standard programme. Those with higher levels of treatment experience prior to entry to the programme (maybe perceiving treatment as having more limitations) give more reserved estimates of community engagement. The current study suggests that the readiness training is having its intended impact on probationers. In addition, the study supports the usefulness of a newly developed measure in evaluating treatment effectiveness.

Drug abuse treatments that take place within the criminal justice system typically employ a Therapeutic Community approach, a unique form of treatment that emphasises the role of the entire community in the treatment process. As with other forms of treatment, treatment readiness and prerequisite skills for efficiently participating in treatment are critical for success. In addition, the nature of Therapeutic Community approaches suggests the importance of community readiness for treatment.

**Eardley T, McNab J, Fisher K, Kozlina S, Eccles J and Flick M (2004) *Evaluation of the New South Wales Youth Drug Court Pilot Program.***

The New South Wales (NSW) Youth Drug Court pilot programme is aimed at reducing offending and drug use amongst young people who have become entrenched in the criminal justice system. The pilot programme started on 31 July 2000. The NSW Attorney General's Department commissioned a consortium from the University of New South Wales, led by the Social Policy Research Centre, to evaluate the pilot programme's operations over the two years to the end of July 2002.

In its first two years the Youth Drug Court received 164 referrals of young people facing possible custodial sentences for serious offences, of whom 75 (46%) were judged eligible and suitable for intensive case management. Of these, 29 (39%) went on to complete the programme to the Court's satisfaction, or to 'graduate'. Graduates were less likely to re-offend than those who did not complete the programme. Graduates of the programme were more motivated to reduce their drug use than those who terminated from the programme.

**Falkin G, Strauss S and Bohem T (1999) *Matching Drug-Involved Probationers to Appropriate Drug Interventions: A Strategy for Reducing Recidivism.***

This study finds that New York City's Department of Probation drug treatment initiative is effective. Outpatient drug treatment is related to significant reductions in recidivism among clients referred, with the greatest reduction in recidivism among those clients who were appropriately matched to outpatient drug treatment.

Neither intensive supervision nor outpatient drug treatment appear to be wholly successful with probation and parole clients. It is important to match clients to appropriate treatment. The right question to ask is: For which kinds of offender is intensive supervision or outpatient drug treatment most appropriate?

**Farabee D, Prendergast M and Anglin M D (1998). *The Effectiveness of Coerced Treatment for Drug Abusing Offenders.***

This paper summarises the substance abuse treatment literature on the effectiveness of various levels of coercion. It provides overall support for the dictum that legally referred clients do as well as, or better than, voluntary clients in and after treatment. However, our review also reveals some illuminating divergence in findings.

Definitions of coercion vary. For example, 'coerced', 'compulsory', 'mandated', 'involuntary', 'legal pressure' and 'criminal justice referral' are all used in the literature. But 'coercion' represents a range of options of varying degrees of severity across the various stages of criminal justice processing. 'Coercion' can refer to: a probation officer's recommendation to enter treatment; a drug court judge's offer of a choice between treatment and jail; a judge's requirement that the offender enter treatment as a condition of probation; or a correctional policy of sending inmates involuntarily to a prison treatment programme in order to fill the beds.

The studies reviewed in this paper look at the relationship between various levels of legal pressure and substance abuse treatment. Five studies find a positive relationship between criminal justice referral and treatment outcomes, four report no difference, and two studies report a negative relationship. Closer inspection of these studies shows considerable variation in the legal pressure applied, different outcome measures, and a range of types of programme and substances treated. The majority of the variation in coerced treatment outcomes is due to (1) inconsistent terminologies for referral status, (2) neglected emphasis on internal motivation, and (3) infidelity in programme implementation. The paper concludes with specific recommendations for improving upon the relative success of current coerced treatment strategies.

**Harrison L, Cappello R, Alaszewski A et al (2003) *Effectiveness of Treatment for Substance Dependence within the UK Prison System.***

A number of drug treatments operate in the British prison system, ranging from 12 Steps facilitation to acupuncture, cognitive-behavioural methods, educational programmes, relapse prevention training, therapeutic communities and pharmacological treatments. There has been a lack of systematic evaluations of these interventions within the prison system.

There have been few methodologically rigorous evaluations of drug services within British prisons. Organisations running treatment programmes and conducting research within the prison environment face a number of problems intrinsic to the system. These range from disagreement about treatment goals to obtaining client data, issues of confidentiality, the availability of drugs, and divergence in meeting targets over, for example, mandatory drugs testing.

**Hills, H A (2000). *Creating Effective Treatment Programs for Persons with Co-occurring Disorders in the Justice System.***

This report considers issues related to developing treatment programmes for people in a criminal justice setting who have co-occurring disorders. It offers a definition of co-occurring disorders and examines conceptual models and principles of treatment for this population. It goes on to review literature on five specific models of intervention to address co-occurring disorders and outlines additional challenges and implications of clinical treatment, for example delivering services to people with co-occurring disorders in criminal justice settings.

**Hussain Q and Cowie M (2005) *Alcohol and Other Drug Treatment Within the Context of the Criminal Justice System – a Review of the Literature.***

This paper reviews the literature on the connection between crime and substance abuse, the types and effectiveness of AOD treatment and the training required to deliver AOD treatment. It examines treatment matching, motivational enhancement, social/coping skills training and cognitive-behavioural treatment. It also comments on the effect on outcomes of the duration of treatment and the role of the criminal justice settings in engaging offenders in treatment. On the basis of its findings, the review draws out implications for treatment planning and delivery for AOD clients in the criminal justice system.

The review includes literature outside the timeframe of this review. The older literature provides an evidence base that “substance abuse treatment produce[s] positive behavioural and psychological changes in alcoholic and drug-related populations and represents a cost-effective form of intervention” and is efficacious in terms of reducing drinking and severe relapse episodes and promoting abstinence.<sup>6</sup>

The literature indicates that some treatment approaches are more effective than others, but it is questionable whether individuals in the general population can be effectively matched with treatments (Project MATCH Research Group, 1997). There is evidence, however, that treatment effects may differ

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<sup>6</sup> This assessment by Hussain and Cowie is based on work by Anglin et al (1989), Holder et al (1991), McLellan et al (1992), Miller et al (1995), Monti et al (1995) and Miller et al (2000). Excepting the final paper which is within this project’s search timeframe, these papers are referenced in the bibliography but were not directly reviewed for this project.

for people involved in criminal justice settings. Several older studies show that treatment provided in criminal justice settings helps people to persist with drug abuse treatment (Collins et al 1983, Collins et al 1988, Hubbard et al 1988).

**Inciardi J A and Martin S S (1993) Drug Abuse Treatment in Criminal Justice Settings.**

This paper is a commentary looking at the history of drug abuse treatment in the US. It does not examine specific interventions or provide evaluation evidence.

**Inciardi J A, Martin S S, Butzin C A, Hooper R M and Harrison L D (1997) An Effective Model of Prison-Based Treatment for Drug-Involved Offenders.**

Treatment is a three-stage system, corresponding to the justice client's changing correctional status – incarceration, work release and parole. In this paper, 18-month follow-up data are analysed for those who received treatment in: (1) a prison-based Therapeutic Community only; (2) a work release Therapeutic Community followed by aftercare; and (3) the prison-based Therapeutic Community followed by the work release Therapeutic Community and aftercare.

The results, in terms of drug relapse and criminal recidivism, support the effectiveness of a multistage Therapeutic Community model for drug-involved offenders, and the importance of a work release transitional Therapeutic Community as a component of this model. The longer clients remain in treatment, the less likely they are to be rearrested or return to prison. These data provide evidence for the effectiveness of the Therapeutic Community continuum extending beyond just an in-prison programme, with significantly improved drug and arrest outcomes.

**Jamieson E (1994) Substance Abuse Education Programs Within the New Zealand Prison System.**

This paper deals with the education portion of a substance abuse programme. The programme has been running in Auckland Prison West (Paremoremo Medium Security) for three years and Auckland Prison East (Paremoremo Maximum Security) for ten weeks. The participants were/are all male, predominantly Maori with one class of ten weeks being conducted solely for Mongrel Mob gang members at the request of the Mob's leader.

The target is to increase the awareness of the responsibility of each person for his own health and wellbeing (physical, mental, emotional and spiritual). The methods employed amount to learning by doing. The general content of the course is: communication skills; stress management; problem solving/decision making; value clarification; peer pressure; alcohol/alcoholism/drug information; dependency/addiction; families and relationships; goal setting/maintaining change; and support agencies. Finally, over the last two weeks goal setting and maintaining change are examined and two ex-inmates are brought into the group.

**Keyser A; Feucht T E and Flaherty R (2002) Keeping the Prison Clean: An Update on Pennsylvania's Drug Control Strategy.**

This paper evaluates the success of the four elements of the strategy and factors that worked. There are four components of the strategy:

- Prosecution – as a general deterrent.
- Interdiction – using drug detection teams.
- Drug testing – random testing of inmates for positive signs of illegal drug use.
- Treatment – using education – Therapeutic Communities.

**Kingi V M, Maxwell G, Morris A and Robertson J (2003) *The Effectiveness of the New Zealand Youth Justice System: Diverting Young People from Courts and Custody.***

This paper looks at the extent to which family group conferences have diverted young people from courts, residences and custody, have involved participants in decisions about how best to deal with offending, have protected the rights of young offenders, have held young offenders accountable, have enhanced young offenders' wellbeing, and have provided culturally appropriateness processes and services. From this it determines the extent to which objectives have been met and family group conferences reflect restorative values. The paper also examines the extent to which conferences have impacted on reconviction and whether or not there are any sex differences in relation to life outcomes and re-offending. Measures of success used are reconviction data.

**Lapham S (2005) *Screening and Brief Intervention in the Criminal Justice System.***

Criminal activity is more closely linked to the use of alcohol than to any other drug. This article describes the scope of alcohol problems among criminal justice populations, summarises current knowledge about alcohol screening programmes, and reviews existing literature on the usefulness of these programmes. Brief intervention approaches used in the criminal justice system are also discussed. The article concludes with recommendations for improving the alcoholism treatment services offered to clients in the criminal justice system.

Recommendations include:

- review screening procedures for people entering the criminal justice system;
- research to evaluate the effectiveness of screening and brief interventions for reducing recidivism among offenders;
- more emphasis on understanding how different groups of alcohol-dependent offenders (e.g. women with post-traumatic stress disorder or young men with antisocial personality disorder) fare within different screening and treatments;
- develop a national strategy to improve and standardise screening systems;
- standards should be established for training personnel conducting screening;
- techniques of brief interventions to be evaluated in criminal justice settings and incorporated into screening protocols;
- screening should address other drug use and mental health disorders that frequently co-occur with alcohol use disorders; and
- treatment services should be made accessible and affordable.

**Lattimore P K; Krebs C P; Graham P and Cowell A J (2004) *Evaluation of the Juvenile Breaking the Cycle Program.***

This report provides the evaluation of the Juvenile Breaking the Cycle programme in Oregon, US. The Juvenile Breaking the Cycle programme aims to effect major changes in the lives of juvenile arrestees

by enlisting agencies to provide: (1) immediate identification of substance abuse problems at the time of arrest; (2) assessment of the substance abuse problems and the presence of other psychological or criminogenic risk factors; (3) the integrated delivery of services; and (4) the systemic use of sanctions, incentives and rewards to encourage compliance with treatment and desistance from criminal involvement.

The Juvenile Breaking the Cycle programme operates across multiple domains – intake and processing, assessment and case management, urinalysis testing, court monitoring and Department of Youth Services supervision and treatment. Services and treatment domains include substance abuse treatment, mental health services, education services and family and social services. Sanctions, incentives and rewards are used to punish negative behaviours and encourage positive behaviours.

**Logan T K, Hoyt W and Leukefeld C (2001) *Kentucky Drug Court Outcome Evaluation*.**

This report looks at three drug court programmes in Kentucky. It provides critical information regarding the outcome of drug court effectiveness. Drug courts evolved in response to the overlap between drug/alcohol abuse and crime (Belenko 1998; Belenko 1999).

All three programmes incorporate three phases which take approximately 18 months to complete. This report provides: (1) an overview of the three programmes; (2) follow-up comparisons of criminal justice involvement and social adjustment indicators for drug court graduates, programme terminators, and a quasi control group; (3) follow-up social adjustment differences of randomly selected graduates and terminators; and (4) an examination of drug court costs and benefits in terms of avoided costs.

Results indicated that 12 months after exiting or being assessed for the programme, graduates were less likely to have: been in prison or jail; entered a new probation period; had felony, misdemeanour, and other convictions; had felony and misdemeanour charges; and used inpatient mental health services. After 12 months, graduates were significantly less likely to have: been in prison; had other convictions; and had out-of-state charges. Also, graduates had significantly fewer days in jail, had fewer other convictions, and made significantly more money during this period than the other two groups.

**Messina N, Burdon W, Hagopian G and Prendergast M (2004). *One Year Return to Custody Rates Among Co-disordered Offenders*.**

Prevalence rates of co-occurring disorders (i.e. a substance abuse disorder and at least one non-drug-related psychiatric disorder) among offender populations are consistently higher than those detected in the community. This study considers the extent to which Therapeutic Community methods meet the needs of offenders with substance abuse disorders and co-occurring psychiatric disorders. The results suggest that prison treatment programmes may need to use more comprehensive diagnostic assessments.

**Miller N S and Flaherty J A (2000). *Effectiveness of Coerced Addiction Treatment (alternative consequences): A Review of the Clinical Research*.**

Clinical experience and treatment outcome studies to date strongly suggest that coercion is fundamental to addiction treatment and favourable outcomes from therapeutic interventions. Often the

alcoholic/drug abuser must be given an opportunity to feel, face or experience the 'consequences' of their AOD addiction before the motivation for treatment can be developed. Effective therapeutic interventions and long-term recovery are more likely to succeed if avoiding 'alternative consequences' are contingent on continued compliance with addiction treatment. Alternative consequences can include loss of benefits, such as entitlement payments, or incarceration.

This review is based on research studies of coerced or mandated addiction treatment in various populations, including people in criminal justice settings.

The authors define coercion as a situation where an alcoholic or drug abuser can choose between complying with addiction treatment or receiving the 'alternative consequences'.

The authors' clinical experience and research studies yield the following conclusions for the relevance of 'alternative consequences':

1. Coercion can be a therapeutic step in initiating treatment interventions and long-term recovery from AOD addiction.
2. Coercion, if applied therapeutically, can result in improved psychosocial status for patients and reduce costs from criminal, health and employment consequences.
3. Coercion can work in most populations that contain patients with AOD disorders, (e.g. public aid, employed, criminal, child welfare).
4. Coercion can reduce illegal drug use and consequent criminal activity in patients and those affected by them.

**Mugford R and Weekes J (2006). *Mandatory and Coerced Treatment.***

This fact sheet examines the issue of mandatory and coerced treatment in Canada. It looks at the background and history of the approach and the current issues in its implementation.

Although controversial, some form of compulsory treatment may be necessary to get some individuals to address their AOD problems. However, there is no research that clearly identifies and differentiates these individuals from others who do not need this type of approach to start the treatment process.

Some assessment of the effectiveness of mandatory and coerced treatment is made despite relatively few studies being available.

**Peters R H and Wexler H K (2005). *Substance Abuse Treatment for Adults in the Criminal Justice System – Treatment Improvement Protocol.***

This Treatment Improvement Protocol provides comprehensive best practice guidelines to counsellors and administrators based on the research literature and the experience of seasoned treatment professionals. The Treatment Improvement Protocol covers the full range of criminal justice settings and all the phases through which an individual progresses in the criminal justice system. It addresses both clinical and programmatic areas of treatment.

Offender-clients will best be served by substance abuse treatment and criminal justice systems that work together to help them in recovery. The challenge for substance abuse treatment practitioners and

criminal justice professionals is to work together to provide a coordinated response to ensure that offenders' and the public's needs are met.

**Prichard J and Payne J (2005). *Alcohol, Drugs and Crime: a Study of Juveniles in Detention.***

This publication reports the results of the Australian Institute of Criminology Drug Use Careers of Offenders Juvenile Survey, 2005. The report summarises the juvenile detainee population's demographic characteristics and patterns of, and links between, drug use and crime. It indicates risk factors for substance abuse and criminal offending, and draws out some conclusions based on its findings.

The report argues the risk factors and patterns of substance abuse and criminality found in the survey support early intervention, as "the earlier that young people first use substances and engage in crime, the worse their criminal and substance using behaviours will become". It also stresses that as juvenile substance-abusing offenders have a range of risk factors, comprehensive interventions involving several government agencies and families may be required to be effective.

Although the survey was comprehensive in surveying a large proportion of the overall juvenile detainee population, the results should be regarded with some caution. The report notes the results are by "the extent to which the self-reported information is reliable". Some research shows that self-report surveys may be less reliable for juvenile populations in terms of over- and under-reporting than for adult offender populations.

**Riehmman K S, Bluthenthal R, Juvonen J and Morral A (2003). *Adolescent Social Relationships and the Treatment Process: Findings from Quantitative and Qualitative Analyses.***

Relatively little attention has been given to gender differences in examining how adolescents respond to drug treatment. This study considers social relationships and drug use for adolescents in residential care.

Girls and boys can have very different experiences and histories in the criminal justice system. This may have a strong influence on their responses to various treatment interventions.

Caution is needed in drawing firm conclusions from a limited study of small sample size. Results point to a need for a better understanding of the treatment needs of boys and girls in residential homes.

**Robertson J and Paulin J (2004). *Feasibility Study of Comparison Group Offending Analysis of Five Police Youth Development Programmes.***

The New Zealand Police have developed a number of programmes aimed at helping youth at risk of offending. Youth Development Programmes target different groups of youth, ranging from those with no offending history to those with an extensive list of prior offences. Approximately half the youth attending the five Police Youth Development Programmes had no prior history of recorded offending. This diversity of youth in the Programmes makes comparing Programmes, in terms of re-offending, highly problematic. The study aimed to compare the offending rates of those who had attended one of the five new Youth Development Programmes for at least six months with a matched group who had

not been on a Youth Development Programme but who had been dealt with by Youth Aid for their offending. The best indicator of future offending is past offending, so programmes taking non-offenders should do better than those taking youth with extensive offending histories.

This paper advocates a more reliable and consistent national system for recording youth offending, which will then make it easier to evaluate types of intervention that aim to reduce youth offending. The NIA computer system (replacing LES) will alter the statistics derived.<sup>7</sup>

### **Sacks J Y (2004) Women with Co-Occurring Substance Use and Mental Disorders (COD) in the Criminal Justice System: A Research Review.**

Associated with the dramatic increase in the numbers of women entering the criminal justice system is the recognition of co-occurring substance use and mental disorders in the lives of female offenders. This article reviews current research examining the prevalence and range of co-occurring substance use and mental disorders among female offenders, the variety of psychosocial problems and the multiple treatment needs of women with co-occurring substance use and mental disorders in the US criminal justice system. Effective treatment approaches must address both disorders. The paper concludes with a discussion of several important treatment issues and provides suggestions regarding an agenda for future treatment and research.

Types of treatment are not specifically identified, but areas of concern in which treatment should be concentrated/targeted are identified, such as trauma-specific interventions, mother-child aftercare programmes, transitional re-entry services to prepare women for successful community living, community-based case management to assist with access to needed services (e.g. entitlements needed for medical/mental health services), and wrap-around services (e.g. childcare, transportation, housing).

Within each environment (prison, diversion, aftercare/continuing care), treatment needs to be comprehensive and flexible to address gender-specific needs and provide continuity of care. The challenge is for the criminal justice system and the substance abuse, mental health and social service systems to work together to fund, develop, implement and evaluate integrated treatment services from incarceration to community.

### **Sacks S, Sacks J, McKendrick KI, Banks S and Stommel J (2004) Modified TC for MICA Offenders: Crime Outcomes.**

The study randomly assigned male inmates with co-occurring serious Mental Illness and Chemical Abuse disorders to either Modified Therapeutic Community or mental health treatment programmes. On release from prison, Mental Illness and Chemical Abuse inmates who completed the prison Modified Therapeutic Community programme could enter the Modified Therapeutic Community aftercare programme. The results showed that the Modified Therapeutic Community group had significantly lower rates of recidivism than those in the mental health group. Therapeutic Community treatment plus aftercare had a much higher success rate (measured in terms of re-offending). Programme and policy

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<sup>7</sup> NIA – national intelligence application, which replaced LES (New Zealand). LES – law enforcement system or the Wanganui Computer System – ceased in 2005.

makers should strongly consider developing integrated prison and aftercare Modified Therapeutic Community programmes for Mental Illness and Chemical Abuse offenders. (Therapeutic Community treatment plus aftercare described fully in Sacks et al 2003.)

It describes three main treatments:

- Prisons Modified Therapeutic Community Program, Personal Reflections (residential): cognitive-behavioural interventions.
- Post-Prison Modified Therapeutic Community Program, Independence House: residential aftercare.
- Mental Health Program: A prison based programme of intensive psychiatric services including medication, individual therapy and counselling, specialised group therapy and cognitive-behavioural education.

### **Sacks S, Sacks J and Stommel J (2003) Modified Therapeutic Community Program.**

The Colorado Department of Corrections developed the Therapeutic Community programme for offenders with Mental Illness and Chemical Abuse. This resulted in a national model for Therapeutic Community treatment of Mental Illness and Chemical Abuse inmates.

Reports from the mental health field have identified the incidence of substance abuse among patients to be 20% to 50%. Likewise, substance abuse treatment programmes typically report that 50% to 75% of clients have a mental disorder. The paper has tables showing interventions – in-prison Mental Illness and Chemical Abuse Therapeutic Community interventions and aftercare Therapeutic Community interventions. Results are not presented in this paper as it is only a commentary on the programme details and origins.

### **Schwebel R (2002). Drug Courts and Adolescents.**

A general review article on how drug courts are working with adolescents. The article is very supportive of drug courts but challenges the use of abstinence as a key strategy in dealing with adolescents referred by drug courts. This paper criticises what the author terms “the mad rush to abstinence”.

### **Searle W and Spier P (2006). *Christchurch Youth Drug Court Pilot: One Year Follow-Up Study.***

This report follows up on the 30 young people who participated in the Christchurch Youth Drug Court pilot. It looks at levels of re-offending in the year after leaving the Youth Drug Court, and includes the results of interviews with some of the young people and their family/whānau about the effect the Youth Drug Court had had on their lives. The Youth Drug Court was credited by most of the young people and their families as significant in helping any reduction in offending. Other factors were maturation and life changes (for example, gaining employment and developing significant relationships). Interviews suggested that the Youth Drug Court and treatment had helped young people to think about what they were doing and the consequences, to feel motivated to make positive changes, and to learn skills that assisted them to make these changes.

The strengths of the Youth Drug Court pilot were: consistency of the Judge; strong multidisciplinary team approach; good interagency coordination; more efficient identification of young people with AOD problems through the onsite Youth Specialty Services clinicians; immediacy of response to treatment

needs and other issues; and intense monitoring of the young person and their family group conference plan.

Concerns and suggestions for improvement include: the need to more effectively address resourcing issues, including service gaps; concerns for victims' rights in the Youth Drug Court process; ensuring accountability of young people for their offending; the need for gradual discharge from the Youth Drug Court to assist young people to 'adjust' back to life; tougher consequences for not meeting Youth Drug Court requirements; and more suitable AOD treatment and residential facilities in Christchurch.

**Shearer R and Carter C (1999) Screening and Assessing Substance-Abusing Offenders: Quantity and Quality.**

This article outlines screening and assessment and argues that they may be useful tools that may serve to improve resource allocation by better matching a client's needs with treatment. Treatment matching is a particular issue as the effectiveness of treatment depends on the offender's readiness to undergo treatment, the degree of their substance abuse and their personal characteristics (such as whether they suffer psychopathy).

The paper categorises screening instruments as structured interviews or self-report of information. It reviews a number of screening tools and discusses types of assessment protocol.

It notes recent research by Rice (1997) that emphasised the importance, and difficulties, of screening offenders for psychopathy who may be potential candidates for placement in substance abuse Therapeutic Communities.<sup>8</sup> Her research suggests that certain treatments, such as Therapeutic Communities, may actually increase the psychopath's future violence. "[P]sychopathy... is a characteristic that is most difficult to screen in offender populations."

**Spohn C, Piper R K, Martin T, and Davis Frenzel E. (2001) Drug Courts and Recidivism: The Results of an Evaluation Using Two Comparison Groups and Multiple Indicators Of Recidivism.**

This article is a review of a Nebraska County Drug Court. The aim of the study was to establish if the use of drug courts was effective in reducing offender recidivism.

The study was based on 12 separate indicators of recidivism. The results were positive and consistent with a range of other evaluation studies, which was that drug courts do lower recidivism rates among drug-involved offenders.

**Thomas G (2005). Harm Reduction Policies and Programs for Persons Involved in the Criminal Justice System.**

This document aims to provide current, objective and empirically based information to inform policies and programmes promoting the reduction of harms associated with substance abuse in Canada. Harm reduction is a health-centred approach that seeks to reduce the health and social harms associated

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<sup>8</sup> Rice (1997) is referenced in the bibliography but was not directly reviewed for this project.

with AOD use, without necessarily requiring that users abstain. This is a non-judgemental response and does not make a moralistic judgement on behaviour.

The following are examples of harm reduction policies and programmes.

- Provision of sterile injection equipment to severely dependent intravenous drug users to reduce the spread of blood-borne diseases.
- Distribution of controlled quantities of alcoholic beverages to chronic alcoholics in homeless shelters to curtail the ingestion of non-beverage alcohol products.
- Provision of drug-involved arrestees with information on safer drug use.
- Amendment of the penalties for cannabis possession to remove criminal sanctions.

Given the significant amount of contact between people who use and misuse psychoactive substances and the criminal justice systems worldwide, it is likely that the potential to reduce health and social harms in these vulnerable and hard-to-engage populations is only beginning to be realised. The full potential for reducing harms among substance users will depend on (1) the use of evidence to identify which policies and programmes are effective, and (2) the diffusion of best-practice policies and programmes to criminal justice systems that are open to implementing them.

**White H R, Morgan T J , Pugh L A, Celinska K et al (2006). Evaluating Two Brief Substance-Use Interventions for Mandated College Students.**

This study evaluates two brief personal feedback substance-use interventions for students mandated to the Rutgers University Alcohol and Other Drug Assistance Program for Students: (1) a brief motivational interview intervention and (2) a written feedback-only intervention. Students mandated to the Alcohol and Other Drug Assistance Program completed the three-month follow-up assessment. Eligible students were randomly assigned to the brief motivational interview or written feedback condition and were followed three months later.

Results showed that students in both interventions reduced their alcohol consumption, prevalence of cigarette and marijuana use and problems related to AOD use between baseline and follow-up. There were no differences between the two intervention conditions in terms of any substance-use outcomes. The results suggest that assessment and written feedback-only students changed similarly to those who had an assessment and written feedback-only within the context of a brief motivational interview. Given the fact that the former is less costly in terms of time and personnel, written profiles may be found to be a cost-effective means of reducing AOD use and related problems among low- to moderate-risk mandated college students. More research is needed with mandated students to determine the efficacy of feedback interventions and to isolate the effects of interventions from the effects of being caught and reprimanded.

**White W L, Dennis M L and Godley M D (2002) Adolescent Substance Abuse Disorders: From Acute Treatment to Recovery Management.**

This article discusses some of the major findings of this research into evidence-based intervention programmes for adolescents associated with alcohol and illicit drug use (particularly the Cannabis Youth Treatment study), and implications for the design of community-based services for these youth

and families. The authors call for supplementing traditional, acute models of brief intervention with more time-sustained, ecologically focused models of recovery management. They highlight six important lessons from the latest adolescent treatment research, based on the Cannabis Youth Treatment study.

This paper predicts a move from sequential, self-encapsulated episodes of acute, institutional care to a more time-sustained, community support model of recovery management. The authors envision increased partnerships between addiction treatment agencies, youth and family service agencies, newly created community supports (e.g. recovery schools) and indigenous support structures (youth-focused mutual aid societies) to create recovery sanctuaries for drug-impacted youth and their families. Also, they say that there are brief treatments that can have positive and enduring effects on the lives of many young people and their families.

**Whitney L (1992) Substance Abuse: a Survey of the Treatment Needs of Prison Inmates.**

This publication reports a substantial, but dated, survey of offenders and prison staff in New Zealand on the nature of offenders' previous substance abuse, the level and types of assistance that were provided inside prisons and on return to the community, the effectiveness of prison programmes and recommendations for improving the programmes in prisons and to minimise relapse after release.

**Wish E, Petronis K and Yacoubian Jr G (2002). CADS: Two Short Screeners for Cocaine and Heroin Dependence among Arrestees.**

While several scales have been developed to screen for drug dependence, none has been developed for specific drugs of abuse within criminal populations. This paper uses data from the Substance Abuse Need for Treatment among Arrestees study in Baltimore to develop screening instruments for cocaine and heroin dependence. The Substance Abuse Need for Treatment among Arrestees interview is a module of questions that diagnoses AOD abuse and dependence. The Center for Substance Abuse Research Arrestee Drug Screener uses questions to identify cocaine and heroin dependence among arrestees.

While the number of persons detained by the criminal justice system is high, only a small percentage of arrested persons are ultimately incarcerated. In 1995, for example, there were more than 15 million arrests in the US, but only 1.6 million persons were incarcerated in state and federal prisons. Most persons detained by the criminal justice system are released to the community shortly after arrest or are released on probation after conviction. These persons represent a large drug-using population. This significant prevalence of substance use suggests that a subgroup of arrestees may be drug dependent and that these arrestees could be referred to treatment upon return to the community. Thus, the ability to identify persons in need of drug treatment quickly and accurately is an important function for the criminal justice system. A brief screening interview that can identify arrestees most likely to be drug dependent would save time, and could also improve how personnel and scarce drug treatment resources are utilised.

**Young D and Belenko S (2002). Program Retention and Perceived Coercion in Three Models of Mandatory Drug Treatment.**

This paper describes research that examined three models of legally mandated treatment in New York City. Retention analyses confirmed that the odds of staying in treatment for six months or more was nearly three times greater for clients in the most coercive programme than with clients in the third group. Results support the use of structured protocols for informing clients about legal contingencies of participation (as a form of coercion) and how that participation will be monitored, and developing the capacity to enforce threatened consequences for failure.

Rates of attrition in drug treatment are high, ranging from 40% to 90%, but studies also show that persons who remain in treatment for a sufficient duration show reduced criminal recidivism and other favourable outcomes. Retention of the person in treatment is a key measure and the best predictor of long-term success. Coercive programmes are more effective.

The treatment sites were all long-standing, traditional Therapeutic Communities. Therapeutic Communities are highly structured residential treatment programmes for substance abusers that are designed to promote pro-social behaviour and drug abstinence. Communal living provides the context for continuous learning where individual change in conduct, attitudes and emotions is monitored and mutually reinforced in the day-to-day routine. Typically, the orientation phase is two weeks, followed by a 12-month middle phase that is usually spent on a relatively remote programme campus in upper New York State. In the final phase, clients return to New York City, where they are encouraged to hold jobs and to save money for independent living in the community.

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