

What works.

**Alcohol and other drug
interventions in prisons.**



360edge.



© 360Edge 2021
First published in 2018
This edition 2021

Jarryd Bartle, Dr Steven Bothwell,
Professor Nicole Lee & Linda Jenner

hello@360edge.com.au
360edge.com.au
1300 988 184

In brief.

People with alcohol and other drug problems are over-represented in the criminal justice system and prisons provide a unique opportunity to address these problems.

The relationship between alcohol and other drug use and crime is complex and treatment in justice settings should reflect evidence-based practice, and target factors that are associated with criminal behaviour.

It is important to address the needs of subpopulations of prisoners. These include women, Aboriginal and Torres Strait Islanders People, young adults, individuals with low literacy, those from diverse cultural and language backgrounds, and prisoners with co-occurring mental health issues or an acquired brain injury.

Evidence of effectiveness is strong for:

- Prison needle and syringe programs
- Tailored cognitive behavioural therapy programs (both short- and long-term)
- Individual counselling
- Opioid substitution therapy
- Therapeutic communities
- Exit preparation programs (including pre-release centres)


Evidence of effectiveness is moderate for:

- Motivational interviewing
- Therapeutic groups

Evidence of effectiveness is insufficient for:

- Peer educator programs
- Contingency management
- Twelve-step peer support groups, except as an adjunct to therapeutic interventions
- Mindfulness based relapse prevention over 'traditional' cognitive behavioural therapy



		Overall positive outcomes	Reduced AOD use	Harm minimisation	Reduced recidivism
Harm reduction	Needle and syringe programs	✓✓	—	✓✓	—
	Peer educator programs	✓	✓	✓✓	—
	Medication-assisted treatment of opioid dependence	✓✓	✓✓	✓✓	✓X
Intensive intervention	CBT	✓✓	✓✓	—	✓✓
	Mindfulness based relapse prevention	✓	✓	✓	✓
	Contingency management	✓✓	✓✓	✓	✓
	Motivational interviewing	✓✓	✓✓	✓	✓✓
Service type	Therapeutic groups	✓	✓	—	—
	Individual counselling	—	—	—	✓
	Exit preparation programs	✓✓	✓✓	—	✓✓
	Pre-release centres	✓	—	—	✓✓
	Therapeutic communities	✓✓	✓✓	—	✓✓
	Twelve-step peer support groups	✓	✓	—	✓
✓✓ Good evidence		✓X Mixed evidence		 360edge.	
✓ Some evidence		— No evidence			

Contents.

ALCOHOL AND OTHER DRUGS AND THE JUSTICE SYSTEM.....	6
Alcohol.....	6
Illicit drugs.....	6
People who inject drugs.....	7
Alcohol and other drug use and offending.....	7
EFFECTIVE ALCOHOL AND OTHER DRUG INTERVENTIONS FOR PEOPLE IN PRISON.....	9
Alcohol and other drug intervention in prison.....	9
Screening and assessment.....	10
Harm reduction programs.....	11
Intensive interventions.....	15
Service types.....	22
PEOPLE IN PRISON WITH SPECIFIC NEEDS.....	27
Women.....	27
Aboriginal and Torres Strait Islander People.....	29
People with co-occurring mental health problems.....	31
Young adults.....	33
People from culturally and linguistically diverse backgrounds.....	35
People with acquired brain injury.....	36
People with low literacy.....	37
REFERENCES.....	38

01 Alcohol and other drugs and the justice system.

The prevalence of alcohol and other drug use among people involved in the criminal justice system is significantly higher than the general population.

Alcohol

Risky alcohol use is highly prevalent among prison populations. In 2018, 34 per cent of Australian prison entrants reported consuming alcohol during the previous 12 months at levels that placed them at risk of alcohol-related harm.¹

Certain groups of prison entrants, such as offenders who are Aboriginal (46% vs. 26% of non-Aboriginal prisoners) and male offenders (35% vs. 27% for females) are more likely to drink at risky levels.

Illicit drugs

Data from the 2018 National Prisoner Health Data Collection showed that 65 per cent of prisoners reported use of an illicit drug in the previous 12 months,¹ compared to about 16 per cent of the general population in 2019.²

National data from the 2020 Drug Use Monitoring in Australia program (DUMA) showed that 82 per cent of police detainees tested positive to at least one drug that was not alcohol, and 46 per cent tested positive to more than one drug type.³ That finding was consistent with an earlier study which found one third reported using two or more drugs in the 30 days prior to being detained.⁴

In 2018, 65 per cent of Australian prison entrants had used an illicit drug in the past 12 months, most commonly methamphetamine (43%) and cannabis (40%), followed by heroin (7%), cocaine (7%), and MDMA (5%). A further 10 per cent had used analgesics/pain killers, 8 per cent reported tranquilliser or sleeping pill use, and 6 per cent had used 'other' analgesics.¹

People who inject drugs

Injecting drugs is more common among prison entrants than among the general population. A 2013 survey found that 45 per cent of Australian prison entrants had injected drugs at some time in their lives, while 67 per cent of that group had used a drug by injection in the month prior to the survey.⁵

Drug use also occurs during incarceration. According to the 2018 Health of Australian Prisoners Report, 16 per cent of a sample discharged from prison reported using illicit drugs whilst in prison, and 8 per cent reported using drugs by injection while in prison.¹

One study found that among a group of people who injected drugs and had a history of imprisonment, almost one-half had injected while in prison.⁶

Alcohol and other drug use and offending

The relationship between drug use and crime is complex, and the topic has generated a considerable body of literature over many decades.

Alcohol and other drug use has been associated with a range of offences including those related directly to drug possession or sale; offences related to drug acquisition such as stealing; and offences related to lifestyle factors that predispose people who use drugs to engage in criminal activity.⁷

While debates continue over whether alcohol and other drug use is a causal factor in criminal activity, evidence does show a relationship between levels of drug use and involvement in criminal activity.⁸

Data from the DUMA program indicated that 46 per cent of all detainees surveyed in 2020 reported that use of alcohol and/or drugs was a contributing factor to their most recent offending,³ which is consistent with international findings.⁹ Continued alcohol and other drug use, concurrent use in particular, has been shown to predict re-offending.¹⁰

Different patterns of use have varying relationships with offending. A 2008 meta-analysis of thirty studies, predominantly US-based, found that the likelihood of offending was about three to four times greater for people who used drugs when compared to those who did not, and that the odds of offending varied across different alcohol and other drugs used: Six times higher for people who

used 'crack' cocaine, three times higher for people who used heroin, and one and a half times higher for people who used cannabis.¹¹

Implications for alcohol and other drug treatment

Around half of all Australian prisoners are likely to meet the criteria for alcohol and other drug dependence.¹²

Given the high prevalence of alcohol and other drug problems among people in Australian prisons and the relationship between alcohol and other drug use and its potential influence on re-offending, the period of imprisonment represents an excellent opportunity to deliver evidence-based treatment.

02 Effective alcohol and other drug interventions for people in prison.

Alcohol and other drug intervention in prison

Alcohol and other drug intervention within criminal justice settings should not only be delivered in accordance with the evidence base for effectiveness among the general population, but should also target factors that are associated with criminal behaviour, particularly the attitudes and beliefs that contribute to offending.⁷

The risk-need-responsivity model

In the criminal justice system, the main aim of any intervention is to stop the person from re-offending.

The risk-need-responsivity model is commonly applied, and relies on:

1. assessment of risk of re-offending
2. assessment of the factors that are associated with criminal behaviour ('criminogenic needs'); and
3. treatment being matched to the person's assessed level of risk and needs that will result in the best positive outcomes ('responsivity').

Criminogenic factors that are amenable to change - referred to as 'dynamic risk factors' - are targeted by a matched type and dose of intervention.¹³ People with a higher risk of re-offending generally receive higher intensity interventions.

Alcohol and other drug interventions

Alcohol and other drug use is one of a range of dynamic risk factors open to change through evidence based treatment. Others include offending-related attitudes, beliefs and values; impulsive behaviour; and poor problem-solving, self-regulation and coping skills.

Addressing alcohol and other drug use by people in prison has been the subject of considerable investigation by researchers over the past two decades, and a number of informative and high-quality systematic and non-systematic reviews have been published in the last ten years.

Evidence-based treatment models that have been tested in a tightly controlled research context are often delivered differently in routine clinical practice. Although there may be practical reasons why facilitators of alcohol and other drug treatment programs adapt these effective treatments to suit a particular context or prisoner group, research shows that the most effective programs are those that are delivered as originally intended.¹⁴

Screening and assessment

Accurate screening and assessment are crucial components of effective alcohol and other drug treatment in custodial settings.

The purpose of screening is to identify the possible presence of an alcohol and other drug use problem to determine whether a detailed assessment is needed.¹⁵

Evidence-based screening tools that are sufficiently sensitive to detect a problem, and able to detect a *specific* problem (e.g. alcohol, cannabis, methamphetamine) are frequently used. They can reduce unnecessary referrals for comprehensive assessment.^{15, 16}

Screening tools may be clinician administered, but many are suitable for self-completion.

Screening should be conducted as early as possible after entry into the justice system.¹⁷

If alcohol and other drug use problems are detected through screening, an assessment to determine the nature and extent of a person's drug problem is then conducted. The assessment should be comprehensive and allow people to be appropriately matched with an alcohol and other drug program that is likely to meet their needs.

Assessments that rely on broad definitions of 'drug use problems' are a key barrier to effective treatment matching.

Identification of alcohol and other drug problems through screening can improve outcomes for people while in prison, and can also drive population level-impact if support is continued post-release.

Modelling of alcohol and other drug screening and treatment for opioid use disorder in the US identified that 1,840 lives could have been saved in 2016 with wide scale uptake of screening and treatment in the prison system, and that approximately 4,400 lives could have been saved with screening, treatment, and post-release treatment retention.¹⁸

Mental health symptoms should also be assessed during at intake due to the high level of co-occurrence between alcohol and other drug and mental health problems in Australia.^{7, 16}

Repeat screening and assessment is also recommended for offenders, as readiness for alcohol and other drug treatment and fear of disclosing alcohol and other drug use is likely to change over time.¹⁷

Harm reduction programs

Prison based alcohol and other drug programs are designed to improve alcohol and other drug related health concerns as well as to address use.

People in custody have disproportionately high rates of blood borne viruses such as hepatitis C virus (HCV), often related to their alcohol or other drug use.^{19, 20}

Alcohol and other drug treatment planning that includes strategies to prevent and treat serious, chronic medical conditions, such as HIV/AIDS, hepatitis B and C, and tuberculosis is a key principle of practice for working with offenders who use alcohol and other drugs.⁷

Harm reduction strategies aim to directly reduce the harms associated with illicit drug use for individuals, families and communities, without necessarily reducing drug consumption.

Strategies can include harm reduction education, needle and syringe programs, blood-borne virus testing and hepatitis vaccination, provision of condoms and dental dams, and access to methadone treatment.²¹

Harm reduction interventions for high-risk behaviours like needle-sharing and unprotected sex reduce the spread of infectious diseases.⁷

Needle and syringe programs

Needle and syringe programs (NSPs) are an evidence-based community harm reduction intervention. They provide clean injecting equipment to people who inject drugs, which has been

shown to effectively reduce injecting risk behaviours²² and reduce the spread of blood borne viruses.^{23, 24}

Strong evidence in Australia and internationally has shown that the use of non-sterile injecting equipment in prisons is associated with extensive HIV transmission.¹⁹

It is estimated that only around 60 prisons out of more than 10,000 worldwide have implemented NSPs.²⁵ The benefits are clear despite limited implementation. They reduce the rate of blood-borne viral transmission among prisoners who inject drugs and improve referral to, and uptake of, appropriate treatment among prisoners with drug dependence.²⁶⁻³⁰

Models of delivery include anonymous syringe dispensing machines, direct distribution by prison health staff and/or non-government organisation workers, and distribution by prisoners trained as peer outreach workers. Despite concerns, prison based NSPs have not resulted in serious, unintended negative consequences.¹⁹

The ACT was the first state or territory to incorporate the potential for a prison-based NSP into Government policy. No prison-based NSPs operate in Australia.

Peer educator programs

Peer education programs in alcohol and other drug treatment services utilise trained peers (i.e. people who have in the past, or currently use alcohol and other drug), to provide targeted drug-related harm reduction and health promotion information relevant to the needs of a specific group.

The aim of peer education is to actively share harm reduction information via a perceived credible source, as well as promote a culture within the drug-using community that promotes healthier behaviours.



Outside of prison, community peer-education is effective at reducing harms associated with injecting drug use.³¹ Peer educators also benefit from implementing education, as they gain knowledge, enhance self-esteem, and reduce their own risky behaviours.³²

There is limited research on the efficacy of prisoner peer education approaches specific to alcohol and other drug use. One qualitative study of alcohol and other drug group treatment reported that programs facilitated by individuals with personal experience of alcohol and other drug use disorder were seen as advantageous.³³

There is evidence demonstrating the effectiveness of peer-led education in prisons for related issues. A systematic review concluded that in-prison peer education programs achieve similar results to those conducted in the community.³⁴

Peer-led HIV education programs have been shown to be effective in reducing sexual and drug taking risk behaviours post-release including not using a condom at first intercourse after release from prison, injecting drugs, past month injection, and sharing injection equipment.^{34, 35}

A small number of studies have consistently shown that peer educators are as effective as professional educators in HIV prevention. Peer educators also improve their own knowledge of health issues as a result of their training.³⁴

One study examined a mentoring and case management program developed for incarcerated women with co-occurring mental health issues and alcohol and other drug use re-entering the community.³⁶ The study provided weak evidence that peer mentoring, rather than peer education, reduced alcohol and other drug use and re-offending, and had positive effects on health behaviours and treatment adherence.³⁴

Detailed examples of effective interventions may guide program development. In a trial of harm reduction peer education among incarcerated men,³⁷ overall positive outcomes were observed in reductions in alcohol and other drug use, sexual risk taking and health self-efficacy across four interventions provided as part of a pre-release and community re-entry program: 1) an educational and skills building program on HIV and alcohol and other drug use delivered by an ex-prisoner who is HIV-positive; 2) the program as delivered by an HIV-negative peer facilitator; 3) a non-peer facilitator; and 4) presentation of health promotion and disease prevention videos.

However, peer education groups, particularly those led by an HIV-positive facilitator, showed significantly greater changes in alcohol and other drug use at three-month follow-up post-release.

All interventions were implemented in a 12-session curriculum, two groups per week over six weeks. The peer education interventions included goal setting, skills-building, role playing and discussion activities. Facilitators used their own personal experiences to demonstrate skills and information.³⁷

Length and intensity of training for peer educators programs vary greatly, and depend on factors such as the program content and mode of delivery.³⁵ In a community setting, a randomised controlled trial demonstrated that a six-session, small-group, cognitive behavioural, skills-building intervention to teach peer education skills to young injecting drug users, reduced the educators' injection risk behaviours.³²

In prison settings, some HIV peer education programs have conducted training for peer educators as intensive courses, such as 40 hours over one week. These courses have shown promising evidence of effectiveness.^{38, 39}

Medication-assisted treatment of opioid dependence

Medication assisted treatment of opioid dependence (MATOD) is associated with reductions in drug use and to some extent, criminal activity among offenders.⁴⁰⁻⁴² People with opioid dependence are overrepresented in the justice system and are at higher risk of mortality.⁴³

The immediate post-release period is often a time of high risk for overdose among offenders whose tolerance to opioids has largely diminished.⁴⁴ MATOD administered to people in prisons is associated with reduced mortality at four year follow up, both in prison and in the community.^{41,45}

People who receive continued access to methadone during incarceration report less use of heroin, fewer non-fatal overdoses, and increased retention in treatment 12 months post-release compared with people not receiving methadone immediately prior to release.⁴⁶

Psychosocial interventions such as cognitive behavioural therapy (CBT) and contingency management delivered concurrently can enhance the effectiveness of MATOD.⁴⁷ MATOD has been available in Victorian prisons since 2003 and the demand for treatment is reportedly high.⁴⁸

Prisoners receiving MATOD are less likely to receive disciplinary tickets while incarcerated and are more likely to engage with community MATOD providers after release. Among those receiving post-release MATOD from the prison provider, there is reduced risk of arrest, new charges and re-incarceration compared to those who do not re-engage with MATOD.⁴⁹

Findings from a New South Wales longitudinal cohort study found that for people who left prison on methadone and remained in MATOD, there was a 20 per cent reduction in re-incarceration during the nine years observation period.⁵⁰ These findings were echoed in a systematic review of opioid interventions among people in prison, which found engagement with MATOD reduced the likelihood of reincarceration and improved the likelihood of employment one year post-release.⁵¹

A broader systematic review of MATOD in prisons, which included experimental and observational studies, concluded that MATOD commenced pre-release was associated with reduced heroin use, reduced injecting and sharing of syringes when doses were adequate, and with increased treatment entry and retention after release.⁵²

Importantly, disruption of MATOD continuity, especially due to brief periods of imprisonment, was associated with significant increases in incidence of HCV.⁵²

An analysis of 14 randomised control trials (RCTs) found that methadone, in particular, had no impact on recidivism outcomes (arrest, conviction, charges, re-incarceration), while treatment with antagonists (such as naltrexone) did reduce criminal activity.⁵³ Similar outcomes for methadone treatment were reported in a meta-analysis, where methadone did not reduce recidivism.⁴⁹

Intensive interventions

Behavioural and cognitive therapies

CBT specifically targets unhelpful thinking and behaviours and is a cornerstone of evidence-based alcohol and other drug treatment.

Cognitive behavioural approaches include self-monitoring, goal setting, interpersonal skills training, relapse prevention, and lifestyle modification. There is considerable evidence for the effectiveness of well-conducted CBT on reducing recidivism among offenders and general prison populations.^{9, 54, 55}

A systematic review and meta-analysis conducted by Lipsey and colleagues in 2007 included 58 studies of CBT treatment with offenders (including 27 studies of treatment based in correctional institutions).⁵⁴ CBT was as effective in reducing recidivism among offenders in prison as it was for offenders in the community.

CBT increased the likelihood that participants would not re-offend in the 12 months after discharge by 1.5 times when compared to controls, resulting in an overall reduction in recidivism of 25 per cent.

While the review included a range of CBT programs, not exclusively focused on alcohol and other drug use, it provided indicators of effective CBT for offenders that appear generalisable to prisoners with alcohol and other drug use problems.

CBT programs are variable. Some are delivered over 5-10 weeks and others over 6 months during residential treatment.

Program intensity (number of CBT program sessions and to a lesser extent the number of contact hours per week) was a better predictor of reduced recidivism. Those at highest risk of re-offending received the greatest benefit.

Lipsey et al.⁵⁴ concluded that the CBT approach was responsible for the overall effects on recidivism, regardless of variable program lengths. They concluded that several key factors were related to the greatest effect sizes:

- Inclusion of distinct anger control and cognitive restructuring components in the CBT program enhanced the effects, while victim impact components appeared to diminish effects
- High quality implementation reflected by close monitoring of the quality and fidelity of treatment delivery (delivering the program as intended)
- Adequate CBT training for the providers
- The addition of individual therapy to group therapy.

A review of the literature on effective alcohol and other drug treatment programs for offenders highlighted the efficacy of CBT in prison.⁹ The review identified two evaluation studies of CBT programs within intensive prison residential programs of at least six months' duration and that applied four hours of treatment programming each week day. This demonstrated greater reductions in drug use and recidivism among people who had been in prison who had received CBT at between six- and 12-months post-release.

One of these studies evaluated the 'Forever Free' six-month program for female prisoners that operated as a modified therapeutic community with a cognitive-behavioural curriculum and relapse prevention focus.⁵⁶ Program elements included individual alcohol and other drug counselling, educational seminars, 12-step programs, parole planning and individual and group

sessions on issues specific to supporting women such as assertiveness training, relationships, trauma, and parenting skills.

The second of these studies evaluated 20 residential unit-based alcohol and other drug treatment programs, based on a cognitive-behavioural model with relapse prevention approach as a core element.^{57,58} Most programs were delivered as a 'moderate' intensity 500-hour treatment program over nine months, with 1 staff member for every 24 participants.

Three of the programs were 'high' intensity treatment units involving 1000 hours of treatment over 12 months and staff ratio of 1:12 participants.⁵⁸ Psychoeducation and group process treatment was generally conducted for a half-day in two consecutive 2-hour sessions five days per week. Group sessions involved 10 to 12 participants on topics such as cognitive skills building, relapse prevention, interpersonal skills building and criminal lifestyle examination, with some availability of individual counselling.

Including contingency management strategies, incentives for participation were included and ranged widely from small items such as pens up to reduced sentence length for non-violent offenders successfully completing the program.⁵⁷

People who entered and completed in-prison residential drug and alcohol treatment were less likely to experience new arrests and alcohol and other drug use in the first six months following release, which reflects positive results across multiple sites of varied security levels and with both women and men in prison, and the potential for replicating the CBT approach in other settings.⁵⁸



A systematic review aimed to identify the most effective treatment for alcohol and other drug use among men in prison. A review of papers between 1995 and 2015 suggested that CBT delivered in a therapeutic community setting was best practice in alcohol and other drug treatment in prisons.⁵⁹

Australian CBT programs

An evaluation of intensive offender programs in three New South Wales custodial settings reflects the effectiveness of the CBT model. CBT components were at the core of these intensive residential treatment programs that ranged from three to 12 months duration.⁶⁰ All programs implemented group-based CBT using either the 'Pathways' intensive program (100 hours) and/or 'Getting SMART' 12-session program.



The evaluation found treatment program completers achieved relatively reduced rates of recidivism in the short-to medium term post-release (6 to 12 months), rates of offences in custody declined among program completers, and program completers were half as likely as non-completers to be charged with a drug offence while in custody.⁶⁰

The 'Pathways' program, also known as 'Criminal Conduct and Substance Abuse Treatment: Strategies for Self-Improvement and Change – Pathways to Responsible Living' is applied in various forms in prisons in Queensland, Western Australia, New South Wales, ACT and Tasmania.⁶¹

It is a high intensity CBT program that addresses the link between criminal behaviours and alcohol and other drug use. In Australian programs it generally involves at least 100 hours of treatment delivered over 16 to 21 weeks (e.g. three two-hour sessions per week).⁶¹⁻⁶³

There is some indication that involvement in and/or completion of programs utilising the 'Pathway' model can positively affect an individual's understanding of their criminal behaviours and ability to manage cravings,⁶⁴ and may be associated with reduced rates of recidivism.⁶⁵

However, evaluations of the Pathways program are influenced by methodological issues, such as such as short-term follow-up and/or involving small samples of people in prison.^{64, 65}

Shorter-term CBT programs

Shorter-term CBT programs are also effective.⁹ Studies of specific intervention programs ranging from eight to 16 weeks duration show positive alcohol and other drug use outcomes, such as increased abstinence.⁹

Program approaches that appear to be aligned with effective CBT treatment for alcohol and other drug use in general populations include the 'Getting SMART' 12-session CBT group intervention (18-24 hours). The program is the most commonly delivered program in the New South Wales corrections system and aims to reduce risk of re-offending by addressing alcohol and other drug use. It also aims to motivate and facilitate involvement in ongoing SMART Recovery meetings.^{60, 66}

Findings from 39 Getting SMART programs across six New South Wales custodial sites in 2007-2008 showed high completion rates (83% of participating prisoners).⁶⁶ However, motivation to complete the program was strongly linked to the knowledge that participation in programs could improve the likelihood of progress to parole.

There is some promising evidence for short-term, but intensive, CBT interventions. Bahr et al.⁶⁷ compared outcomes for people in prison who received an intensive, short-term CBT program (the OUT Program) with a matched sample who did not participate in the program. The program focused on skill building, providing life-skills training, cognitive distortion awareness, and therapeutic interventions.

The 30-day intervention was delivered as an intensive reintegration preparation program and involved 100 hours of treatment, delivered five days per week over four weeks. The authors noted high intensity treatment has previously been categorised as programs with more than 3.3 hours per week.⁶⁷

Study participants were followed up 14 months after release. Those who participated in the treatment program were significantly less likely to have returned to prison for more than 30 days compared with those who did not participate (27% vs 46%) and reported overall reduced rates of any re-arrest (49% compared to 63% of control group).

Mindfulness Based Relapse Prevention

Mindfulness based interventions for alcohol and other drug problems comprise a range of treatments and approaches, which have been developed to target relapse and improve alcohol



and other drug treatment outcomes. Mindfulness based interventions form part of the suite of cognitive and behavioural therapies. These interventions involve intentional and sustained focus of attention on present moment experiences, with an attitude of acceptance, non-judgment, and curiosity.^{68, 69}

Mindfulness based interventions may be almost wholly based on principles of mindfulness and mindfulness meditation practice, such as mindfulness-based cognitive therapy (MBCT). Or, like dialectical behaviour therapy (DBT) and Acceptance and Commitment Therapy (ACT), combine mindfulness techniques with other therapeutic approaches.⁶⁸

Mindfulness based relapse prevention (MBRP) integrates secular mindfulness meditation practices with traditional cognitive behavioural relapse prevention techniques, such as identification of individual risk factors and triggers and improving coping skills. MBRP was designed as an outpatient therapeutic group program.⁷⁰

Studies of mindfulness based meditation approaches for alcohol and other drug problems, including among incarcerated populations^{69, 71} and a number of randomised controlled trials into the effectiveness of MBRP for offenders^{72, 73} provide promising evidence of its efficacy.

However, systematic reviews, which included two trials of MBRP in prison settings, found that there was limited high quality evidence available on the effects of MBRP and additional studies are required.^{74, 75}

Contingency management

Contingency management is a behavioural therapy that is underpinned by the premise that reinforcing 'non-drug using' or 'desirable' behaviours should decrease drug use.⁷⁶

Contingency management involves the provision of rewards to reinforce treatment goals, such as attendance and participation in therapy and/or pharmacotherapy, and alcohol and other drug abstinence. The most common method of contingency management in prisons involves the use of tokens or points. These tokens or points can be 'earned' for good behaviour or treatment adherence and can be redeemed for material goods or access to recreational activities.⁷⁷

There is evidence to support contingency management as an effective approach to increase abstinence.⁷⁶

Contingency management is compatible with strategies used in many criminal justice settings, in which reinforcements and sanctions are routinely used. It is also being implemented to support alcohol and other drug treatment and compliance goals in settings like drug courts and probation agencies.^{78,79}

The evidence-base for use in these settings is still developing. Its effectiveness in prison alcohol and other drug treatment programs is not clear; however, 'contingency contracting' is considered an important element of the compulsory drug treatment programs.⁸⁰

Motivational interviewing

Motivational interviewing is an approach that emerged from a humanistic framework in response to traditional confrontational approaches commonly used in alcohol and other drug treatment.⁸¹

The approach is focused on increasing a person's readiness to change. Strategies to increase motivation include exploring ambivalence about alcohol and other drug use and highlighting discrepancy between current alcohol and other drug use and the person's goals for the future. A growing body of evidence supports the effectiveness of motivational interviewing with people who use alcohol and other drugs.⁸²

A 2009 systematic review examined the effectiveness of motivational interviewing with offenders and, though outcomes varied across studies, motivational interviewing was associated with reduced offending, improved retention in treatment and enhanced motivation to change.⁸³

Another review found motivational interviewing had positive effects on alcohol and other drug use outcomes among people convicted for the first time of driving under the influence of alcohol and in detention; incarcerated adolescents with depressed mood; and women with risky patterns of alcohol and other drug use.⁸⁴ It involved an in-reach alcohol screening and motivational interviewing intervention with women in prison using the Alcohol Use Disorder Identification Test-Including Drugs tool (AUDIT-12) and provision of personalised feedback on screening results using a brief motivational interview format.⁸⁵

There was significantly greater improvement in alcohol and other alcohol and other drug use screening results at two months' post-release among women randomly assigned to the intervention compared to treatment as usual groups.

Service types

Therapeutic groups

Almost all prison-based alcohol and other drug programs are delivered in a group setting. A review of health interventions for prisoners found that psychotherapy group interventions achieved positive alcohol and other drug use outcomes in studies of Acceptance and Commitment Therapy, group interventions for women prisoners, and in male and female prison-based modified therapeutic communities.⁸⁴

Group programs appear most effective when they are targeted towards single gender groups and are engaged in voluntarily.⁸⁶

Individual counselling

Individual counselling significantly improves the impact of CBT group-based rehabilitation programs on recidivism outcomes among the general prison population.⁵⁴ It is likely that this finding is applicable to alcohol and other drug specific CBT programs.

Programs defined as 'group counselling' for people in prison in the literature may also include elements of individual counselling. Such programs are effective at reducing offending.⁸⁶

Effective approaches often utilise combinations of modalities and include individual counselling with group CBT programs. For example, the Canadian Offender Substance Abuse Pre-release Program (OSAPP) delivered 26 three-hour group sessions plus three individual counselling sessions to people in prison with moderate to severe alcohol and other drug problems.^{12, 55}

The program demonstrated good completion rates (89%) and lower recidivism among program completers: 42 per cent of completers were imprisoned again in the follow-up period compared with nearly 49 per cent of matched comparison offenders.



Exit preparation programs

Programs that prepare people in prison with alcohol and other drug problems for transition into the community vary widely.

A number of evidence-based approaches, such as CBT and motivational interviewing, are delivered in prisons to support re-integration into the community, to facilitate engagement with treatment, and reduce relapse to alcohol and other drug use and/or reoffending.

An intensive 30-day CBT program for people in prison with alcohol and other drug problems who were serving short sentences was designed to prepare participants for re-integration into the community. Program participants spent five hours per day in treatment, five days per week for four weeks, equating to 100 treatment hours.

The program was associated with significantly lower recidivism: 27 per cent of the treatment participants returned to prison for more than 30 days, compared with 46 per cent of a matched comparison non-treatment group.⁶⁷

A study among women with alcohol and other drug problems examined the effect of a prison in-reach brief screening and feedback intervention, which included use of motivational interviewing for those with risky patterns of alcohol and other drug use.⁸⁵ There was a significantly greater reduction in alcohol use two-months post-release among women randomly assigned to the intervention compared with those not receiving the intervention. Recidivism was not measured in the short follow-up period.

Continuity of care post-release is essential for maintaining the benefits of in-prison psychological intervention. While several studies have reported the benefits of psychological intervention while in prison on recidivism, one systematic review and meta-analysis demonstrated that the benefits observed are likely explained by publication bias and small-study effect size.⁸⁷ Benefits are no longer observed when only studies with large cohorts (≥ 50 participants) are included in analyses.

Therapeutic communities post-release were associated with decreased rates of recidivism, which demonstrates the importance of sustained care for people in prison after release.

Pre-release centres

Pre-release centres are a specialised form of exit preparation program. Pre-release centres operate in a number of states, including New South Wales, South Australia, Western Australia and the Australian Capital Territory.⁶⁴

In New South Wales, female offenders with alcohol and other drug problems who participated in the specially designated pre-release Bolwara Transitional Centre, showed consistently lower rates of recidivism compared to a matched control group at 6, 12 and 24 months after release.⁶⁰

Bolwara was separated from the main correctional complex and provided support for women with histories of alcohol and other drug use problems and included specialised services for Aboriginal participants provided on site and in the community, including a 'Koori women's group'. After controlling for other risk factors, the study reported Bolwara Transitional Centre participants were around 30 per cent less likely to re-offend and return to custody for a new offence.⁶⁰

Therapeutic communities

Prison-based therapeutic communities are therapeutic communities that have been modified to the requirements of correctional settings and adapted to the needs of different prisoner populations.

A comparatively large evidence base shows mixed outcomes, but the therapeutic communities are widely considered to be an effective treatment for people in prison with alcohol and other drug problems, demonstrating relatively consistent reductions in recidivism and alcohol and other drug use.^{9, 12, 86}

A systematic review reported on 14 studies focused solely on examining the effectiveness of therapeutic communities among people in prison who were alcohol and other drug dependence at the time of initial imprisonment.⁸⁸

Three-quarters of the studies showed therapeutic communities were effective in reducing rates of re-imprisonment; seven of the nine studies that examined alcohol and other drug relapse found the intervention to be effective in reducing rates of relapse; and five of the nine studies reported that therapeutic community participation reduced re-arrest.

From four studies, including results at longer-term follow up periods of two or more years, overall results suggest that treatment gains may taper over the longer-term.

Overall, across three main outcome areas, therapeutic communities were shown to have produced the greatest effect on reducing re-imprisonment, reducing alcohol and other drug relapse, and reducing rates of re-arrest than other treatment alternatives. These effects were irrespective of aftercare or type of therapeutic community applied, though the combination of therapeutic community with aftercare programs may increase reductions of re-imprisonment and drug use.⁸⁸

In contrast, one RCT examined the effects of treatment modality (therapeutic groups vs. therapeutic communities) on re-imprisonment rates among 604 people leaving prison over a three-year follow-up period.⁸⁹

The study demonstrated that the superiority of prison therapeutic community to less intensive group counselling (total of 150 hours' treatment) was not fully supported; TC resulted in significantly reduced likelihood of re-imprisonment; however, differences between the interventions' effects on reducing re-arrest and drug relapse were not significant.

The investigators also explored the relationship between risk of reoffending characteristics and alcohol and other drug program type and found that not all people considered high risk responded positively to a therapeutic community environment.

The authors concluded that the most intensive intervention may not always be the most appropriate for high-risk offenders and suggested that other factors that affect response to treatment must be considered including negative affect, cognitive limitations, interpersonal skills, and prior treatment when conducting treatment matching.

Twelve-step peer support groups

Twelve step groups such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA) are often used to complement alcohol and other drug interventions but are not considered therapeutic treatments in their own right.

Studies have shown that AA attendance is associated with reduced alcohol use and symptoms of dependence, and NA and Cocaine Anonymous attendance are associated with positive outcomes such as greater rates of abstinence.^{90, 91}

Participation in these support groups, particularly after completing a treatment program, can significantly reduce relapse after treatment, result in longer periods of ongoing abstinence than treatment alone, and help improve social functioning of people who are focused on maintaining changes to their alcohol and other drug use.⁹⁰

While many custodial settings provide access to 12-step groups, in particular AA and NA, there is limited research concerning its effectiveness in prison settings.⁸⁶

An earlier review and meta-analysis from 1999 concluded that while quality evaluations were lacking, 12-step groups were widely used as adjunct to other programs and were considered promising approaches for reducing recidivism for imprisoned offenders with alcohol and other drug problems.⁹²

03 People in prison with specific needs.

Some subpopulations of people in prison have specific needs that require attention during alcohol and other drug treatment.

Women

The profile of women involved in the criminal justice system differs from their male counterparts. Women have complex needs related to increased risk of exposure to victimisation, trauma and abuse; high rates of mental and physical health problems; primary parenting responsibilities; and issues with other relationships.⁹³



Women in prison may also experience greater severity of alcohol and other drug dependence than men.⁹⁴ Australian studies have reported different alcohol and other drug use patterns, including greater use of heroin, analgesics and sedatives among women in prison compared to men in prison.^{20, 95}

Alcohol and other drug use problems among women represent 'an acute dynamic risk factor' that had an immediate association with offending behaviours.⁹⁶

While much is known about effective treatments for male offenders, interventions for women offenders has been subject to less investigation, and the variation in methodology among studies is a barrier to drawing firm conclusions about the effectiveness of these programs.⁹⁷

Nevertheless, effective alcohol and other drug treatment can reduce women offenders' involvement with the criminal justice system and decrease their risk of re-offending,^{98, 99} and therefore facilitating women offenders' entry into alcohol and other drug treatment is crucial.

One study found that women who participated in alcohol and other drug treatment whilst in prison were less likely to reoffend than those who did not participate, and overall positive outcomes were found on measures of mental health and alcohol and other drug use.⁹⁹ Large effect sizes were linked to interventions that applied CBT, group trauma therapy and psychoeducation, and these interventions were found to reduce symptoms of anxiety, depression and trauma.

Researchers Hall et al.¹⁰⁰ recommended that interventions should comprehensively address psychological and social needs of women such as victimisation, alcohol and other drug use and other mental disorders to increase the effectiveness of standard alcohol and other drug treatment programs.¹⁰⁰

When evidence based alcohol and other drug treatment is also gender sensitive (for example, treatment encompassing women's experience of trauma, influences of their relationships, role and parenting responsibilities) in criminal justice settings it has been shown to reduce drug use and criminal behaviour.^{98, 101}

A Cochrane review also found gender responsive treatment, as well as TCs, to be associated with a reduction in re-imprisonment rates for women offenders with alcohol and other drug problems.⁹⁷

Studies have also shown that a longer duration of program is not always the best option. For example, a 2014 study with women in prison experiencing co-occurring mental health and alcohol and other drug use disorders receiving prison based treatment reported greater 'misconduct' was associated with treatment over 90 days, and 'misconduct' further increased based on exposure to more than 180 days of treatment.¹⁰² This finding is contrary to the general understanding that longer time in treatment is associated with better outcomes and suggests optimal treatment time for some client groups may be shorter than expected.

Like their male counterparts, aftercare programs for women offenders post-release are important for maintaining treatment gains.⁹⁴ Aftercare is associated with reduced risk of recidivism, especially when combined with treatment that was initiated while women were in prison.¹⁰³



Aboriginal and Torres Strait Islander People

Aboriginal and Torres Strait Islander People are over-represented in Australian prisons. The National Drug Strategy 2017-2026 highlights both Aboriginal and Torres Strait Islander People and people involved with the criminal justice system as priorities for harm reduction.¹⁰⁴

Aboriginal and Torres Strait Islander People have a number of culturally specific criminogenic needs in alcohol and other drug treatment that include acculturation stress and de-culturation; separation from family, communities and land; physical and mental health problems; violence; discrimination; literacy and numeracy problems; generational unemployment; and significant and specific transitional and post-release needs.^{105, 106}

The National Indigenous Drug and Alcohol Committee note that alcohol and other drug use issues experienced by incarcerated Aboriginal and Torres Strait Islander offenders include transmission of blood-borne viruses, and comorbidity of mental health and alcohol and other drug use issues, which is a significant factor in Aboriginal and Torres Strait Islander offenders' over-representation in the criminal justice system.

Alcohol, in particular, is a common precursor to offending, and Aboriginal offenders are significantly more likely to report being under the influence of alcohol at the time of the offence or arrest than non-Aboriginal Australian offenders.^{106, 107}

While imprisoned, issues such as separation from family and culture, and previous history of an undiagnosed or untreated health condition can increase risk of harms for Aboriginal and Torres Strait Islander People.

Involvement with the criminal justice system may provide opportunities to provide interventions to improve the general health of the person while imprisoned.^{106, 108}

Aboriginal and Torres Strait Islander People in prison are more likely to use health services when in prison than in the community, although access to in-prison treatment programs has been found to be particularly limited among Aboriginal and Torres Strait Islander People.

A study with Koori people in prison in Victoria found that barriers to accessing treatment included feelings of mistrust, lack of cross cultural awareness and stigma, in particular in relation to blood borne viruses and sexually transmitted infections.¹⁰⁸

Empirical research identifying effective treatment approaches specifically for Aboriginal and Torres Strait Islander offenders is lacking; however, a range of studies and treatment manuals can inform the development and delivery of alcohol and other drug treatment for Aboriginal and Torres Strait Islander more broadly.

General recommendations for working with Aboriginal people with alcohol and other drug problems emphasise collaborative, culturally sensitive, strengths-based and family inclusive approaches, including involvement of trained Aboriginal workers and the use of culturally specific written materials.^{105-107, 109, 110}

Treatment delivery should be culturally specific, that is, delivered within a framework of cultural competence, in which respect for Aboriginal people's culture is recognised, respected, and safeguarded; cultural safety that ensures an environment for Aboriginal people that is free from 'assault, challenge, or denial of a person's identity'; and cultural security in which cultural values are actively incorporated into the planning, delivery and evaluation of treatment practice.¹¹¹

Dolan and colleagues noted that from the limited evidence available, culturally specific alcohol and other drug treatment for marginalised populations are required to improve engagement with alcohol and other drug treatment in both prison and the community; however, there was a paucity of research available to guide the development of such programs. In 2009, there were seven Aboriginal specific programs provided by external organisations in four states.¹⁰⁸

An evaluation of three intensive alcohol and other drug programs in New South Wales custodial centres found that Aboriginal and Torres Strait Islander participants showed higher completion rates than non-Aboriginal offenders (75% vs. 63%).⁶⁰

Program graduates showed a lower rate of in-prison alcohol and other drug use than non-graduates, and improvements in health-enhancing attitudes and behaviours such as motivation to change.

Two programs were delivered in designated wings. For example, the Bolwara Transitional Centre was a separately located pre-release program for female offenders that included specialised services for Aboriginal participants provided on site and in the community, including a 'Koori women's group'.⁶⁰

People with co-occurring mental health problems

The prevalence of mental health problems among people in prison in Australia is high. In 2012, 21 per cent of Australian prison entrants were currently taking medication for a mental health disorder and 15 per cent reported very high levels of emotional distress.²⁰

International studies have found that compared to the wider community, people in prison were several times more likely to have psychosis or major depression, and ten times more likely to have an antisocial personality disorder.⁵³

In Australia it is estimated that about eight per cent of men in prison and 14 per cent of women in prison had a major mental disorder with psychotic features, compared to less than one per cent of the general population.¹¹²

Little is known about evidence-based alcohol and other drug treatment specifically for people in prison with concurrent mental health problems. A Cochrane review of interventions for offenders with co-occurring alcohol and other drug problems and mental illness assessed evidence of drug use and/or criminal activity outcomes, while mental health and wellbeing outcomes are intended to be included in future reviews.¹¹³

The review concluded that two trials of therapeutic communities and aftercare showed promising results for reducing re-imprisonment among this group. However, with only two studies available, the wider applicability of the finding is somewhat limited.

Across studies, the therapeutic community model showed less success in reducing rates of re-arrest and limited or mixed findings about reducing self-reported drug use.

While trials of therapeutic communities showed mixed findings, one randomised trial that involved a 12 month prison-based modified therapeutic community with the option of six months voluntary residential aftercare reported a range of positive outcomes.⁵³

Compared with people in prison randomised to routine mental health treatment, participation in modified therapeutic communities was associated



with greater reductions in alcohol and drug use at one year after release and significantly reduced rates of re-imprisonment.⁵³

All participants had both a serious mental disorder and an alcohol and other drug use disorder (32% used drugs, 32% used alcohol).

Modified therapeutic communities commonly retain the key structures, elements and processes of a traditional therapeutic community approach and adapt the model to better address the needs of specific groups, and in this case those with co-occurring mental health and alcohol and other drug disorders.

Modifications can include less confrontational therapeutic styles, greater flexibility in treatment phases, more individualised treatment, and employment of more professional staff, including doctors, psychiatrists, and counsellors with postgraduate training.^{114, 115}

Other helpful modifications included incorporation of a CBT curriculum that emphasised criminal thinking and behaviour and psychoeducational classes regarding the interrelationship of mental illness, alcohol and other drug use, and criminality.¹¹⁵

One study showed motivational interviewing among imprisoned adolescents with depressed mood and recent alcohol and other drug use was effective in reducing marijuana use and to some degree alcohol use, compared with relaxation training.^{84, 116}

Integrated dual diagnosis treatment programs following an in-custody treatment unit demonstrated increased use of outpatient medication services and reduced average days of hospitalisation over 18 months compared with treatment as usual on release from the unit. No relevant drug or crime outcome measures over time were reported.⁵³

For men with co-occurring amphetamine dependence and attention deficit hyperactivity disorder (ADHD), medication with slow release methylphenidate commenced two weeks prior to release from prison and continued in conjunction with outpatient CBT. This combination showed greater reductions in ADHD symptoms and risk for alcohol and other drug relapse than those not receiving medication.⁸⁴

Young adults

Young adults comprise a significant part of the adult prison population. In Victoria, around half of all young offenders aged between 18 and 21 given a custodial sentence were sentenced to an adult prison.¹¹⁷

Young offenders between 18 and 21 years are commonly given less severe sentences than adult offenders. It is recognised that their immaturity and inexperience may make them less culpable, and that rehabilitation should be the focus.¹¹⁷ However, there is limited specific evidence and programming for young adult offenders, with most research focused on juvenile and adolescent offenders aged under 18 years.

Young people engaged with Victorian specialist alcohol and other drug services in the community have been found to have extremely high levels of harmful alcohol and other drug use and complex psychosocial needs, with two thirds of treatment clients having criminal justice involvement.¹¹⁸

Prison entrant data collected in 2015 showed that prison entrants aged 18-24 years were the most likely to have used illicit drugs within the past 12 months (76%). The most common illicit drugs used were methamphetamine (59%) and cannabis (53%).¹¹⁹

Offenders in Victoria aged 25 years and under have an increased likelihood of recidivism, with earlier research indicating younger offenders may also have a shorter time to re-offending than older counterparts.¹²⁰

As with the literature for alcohol and other drug use treatment more broadly, evaluations of alcohol and other drug treatment programs for people in prison in the US and Australia have found that younger age is associated with greater treatment drop-out.^{14,66}

The literature emphasises the need to successfully engage younger people in prison in treatment and provide support for complex needs such as social skills and community integration, mental health and education.

Research into effective treatment for younger offenders is primarily focused on juvenile and adolescent populations. There is little quality evidence to guide treatment for young adults. However, more preparatory work and motivational approaches may be of benefit.⁶⁶

From the juvenile offender literature, which can extend to studies involving offenders aged 18-19 years, counselling interventions, provision of multiple services and skills building are effective approaches to decrease juvenile recidivism, while tailored treatment models that include family show promise for reducing alcohol and other drug use.¹²¹

While not solely alcohol and other drug focused, positive outcomes of a multi-service and tailored approach are evident from the evaluation of Victoria's specialist 35-bed youth unit within Port Phillip Prison for people in prison aged 18 to 25 years.

The unit provides youth specific programs and support covering education, offending behaviour, personal development, leisure and recreation and employment, and includes alcohol and other drug programs.

People in prison placed in the unit for 60 days or more had lower recidivism rates compared to the comparison groups (32.5% vs 41%). They also reported the unit was a safer environment, was viewed more positively by individuals, and had a greater rehabilitation focus than two mainstream comparison groups.¹¹⁷

However, when confounding variables are statistically controlled in analyses, relatively few differences are found in the effectiveness of different types of therapeutic interventions for juvenile offenders.¹²²

Three factors were identified as major predictors of program effectiveness: a 'therapeutic' intervention philosophy; serving high risk offenders; and quality of implementation.

A meta-analysis showed that aftercare programs for young adult and juvenile offenders released from correctional institutions had a small effect on recidivism, with more intensive programs associated with lower rates of rearrests and reconvictions.¹²³

Greater effect was found for aftercare programs that were well implemented (as opposed to those programs that described implementation difficulties), consisted of individual rather than

group treatment, and were aimed at older and 'high-risk' youth. Program initiation (pre- or post- release) and program duration showed no effects.

People from culturally and linguistically diverse backgrounds

In June 2014, Victoria had the highest proportion of people in prison born overseas (25%), with nearly 20 per cent having English as their second language.¹²⁴

Despite growing numbers of people in prison from diverse cultural and linguistic backgrounds, very little is known about what works in prison-based alcohol and other drug treatment for these populations.

In a survey on help seeking among people in prison in the United Kingdom, over half those whose first language was not English reported they would not seek help for alcohol and other drug problems - twice as many as native English speakers.¹²⁵

Language and other cultural factors are significant barriers for help seeking and treatment engagement for people in prison,¹²⁵ suggesting that prison based alcohol and other drug programs must be culturally informed, and use materials that can be read and understood by participants.

There is limited evidence to guide effective engagement and response strategies with people in prison from diverse cultural backgrounds, and mixed findings regarding efficacy of treatment across cultural groups. Some interventions such as counselling programs, have been shown to be effective in reducing re-offending across ethnic and racial groups.⁸⁶



People with acquired brain injury

Acquired brain injury (ABI) among people in Australian prisons is significant, with over one third of prison entrants at increased risk of ABI as indicated by whether they had ever received a blow to the head that resulted in a loss of consciousness.¹¹⁹

In a cohort experiencing high rates of mental health and alcohol and other drug use disorders, it is also expected that a significant minority of prisoners will have varying levels of alcohol related brain damage (ARBD).¹²⁶

Information concerning the most effective alcohol and other drug treatment response for this group is lacking, and importantly, treatment outcome studies on which best practice is based usually excludes participants with ABI due to impairment.

A report by the UK Royal College of Psychiatrists reviewed the literature relating to ARBD, including among prisoner populations.¹²⁶

The close association between ARBD and traumatic brain injury was noted and screening for both was recommended. The report indicated that for prisoners with ARBD, a considerable proportion of these individuals will improve through abstinence.

It is recommended that alcohol misuse screening instruments are routinely used on admission to prison to identify people at risk of ARBD. Reassessments should then be made once individuals have settled into routine prison life and are referred to appropriate external services on release.

The report found that people in prison who have significant deficits due to ARBD may be unable to engage well with CBT treatment programs, which could impede their progress towards gaining release.¹²⁶

Recommendations for screening and management of ARBD within the UK prison service were:

- Alcohol withdrawal may need to be conducted under care of the local hospital.
- Primary and secondary screening should incorporate alcohol screening instruments.
- Individuals identified as having alcohol-related problems should be signposted to appropriate support facilities.
- People with alcohol-related problems should be reassessed prior to release from prison and referred to appropriate external agencies.

People with low literacy

Education levels among prisoner populations are commonly lower than in the general population. Higher levels of schooling are associated with a lower probability of arrest and imprisonment.¹¹⁹

While it is clear that alcohol and other drug treatment interventions need to be accessible and appropriate for a wide range of reading and comprehension levels, there is limited research about best practice alcohol and other drug treatment specific to people in prison with low literacy.

A 2010 evaluation of the correctional centre in Canberra highlighted concerns that treatment programs may not adequately cater to those with low literacy levels, and interventions requiring homework and reflection on ideas considered 'text-book stuff' could be a barrier to treatment engagement for some people in prison.¹²⁷

Participant criteria for the Getting SMART program, a widely used CBT-based intervention in NSW prisons, requires a 'reading level 2' and 'writing level 1' based on the Australian Core Skills Framework (ACSF) literacy level.⁶⁶

Only three of the fifty-nine program participants who dropped out of the program reported doing so due to inadequate literacy.⁶⁶

The implications for alcohol and other drug program practice are to assess the literacy levels of all participants and ensure that the reading materials and handouts are set at an appropriate literacy level.

People in prison who have low literacy can and should be encouraged to participate in alcohol and other drug group programs, and group facilitators should check participants' understanding of the materials at the end of each session and adjust as necessary.

For some, it may require specially developed handouts with graphics rather than words, or an additional individual session to explain the materials, especially when CBT practice tasks or 'homework' is required.

References.

1. Australian Institute of Health and Welfare. The health of Australia's prisoners 2018. Canberra: AIHW; 2019. Report No.: PHE 246.
2. Australian Institute of Health and Welfare. National Drug Strategy Household Survey 2016: detailed findings. . Canberra AIHW; 2017.
3. Voce A, Sullivan T. Drug use monitoring in Australia: Drug use among police detainees, 2020. Canberra: Australian Institute of Criminology; 2021.
4. Sweeney J, Payne J. Poly drug use among police detainees. Trends and Issues in Crime and Criminal Justice No 425: Australian Institute of Criminology; 2011.
5. Butler T, Callander D, Simpson M. National Prison Entrants' Bloodborne Virus and Risk Behaviour Survey Report 2004, 2007, 2010 and 2013. Kirby Institute (UNSW Australia) 2015.
6. Fetherston J, Carruthers S, Butler T, Wilson D, Sindicich N. Rates of injection in prison in a sample of Australian-injecting drug users. Journal of Substance Use. 2013;18(1).
7. National Institute on Drug Abuse (NIDA). Principles of Drug Abuse Treatment for Criminal Justice Populations: A Research Based Guide In: U.S. Department of Health and Human Services editor.: National Institutes of Health 2012.
8. Payne J, Gaffney A. How much crime is drug or alcohol related? Self-reported attributions of police detainees. Trends & issues in crime and criminal justice No 439: Australian Institue of Criminology 2012.
9. Bahr SJ, Masters AL, Taylor BM. What Works in Substance Abuse Treatment Programs for Offenders? Prison Journal. 2012;92(2):155-74.
10. Dowden C, Brown SL. The role of substance abuse factors in predicting recidivism: A meta-analysis. Canadian Journal of Criminology. 2002;8(3):243-64.
11. Bennett T, Holloway K, Farrington D. The statistical association between drug misuse and crime: A meta-analysis. Aggression and Violent Behavior. 2008;13(2):107-18.
12. Casey S, Day A. Prison Substance Misuse Programs and Offender Rehabilitation. Psychiatry, Psychology and Law. 2014;21(3):360-9.

13. Wooditch A, Tang LL, Taxman FS. Which Criminogenic Need Changes Are Most Important in Promoting Desistance From Crime and Substance Use? *Criminal justice and behavior*. 2014;41(3):276-99.
14. Miller JM, Miller H, Tillyer R. Effect of Prison-based alcohol treatment: a multi-site process and outcome evaluation, final report. National Institute of Justice, Office of Justice Programs, U.S. Department of Justice; 2013.
15. Jenner L, Lee NK. Screening for substance use and related issues by specialist alcohol, tobacco and other drug treatment and support services in the ACT: discussion paper. Canberra: Alcohol Tobacco and Other Drug Association ACT; 2013.
16. Department of Health and Human Services. Alcohol and drug treatment services - Catchment based intake and assessment guide. Victoria: Department of Health and Human Services; 2015.
17. Center for Substance Abuse Treatment. Substance Abuse Treatment For Adults in the Criminal Justice System. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2005.
18. Macmadu A, Goedel WC, Adams JW, Brinkley-Rubinstein L, Green TC, Clarke JG, et al. Estimating the impact of wide scale uptake of screening and medications for opioid use disorder in US prisons and jails. *Drug Alcohol Depend*. 2020;208:107858.
19. Jürgens R, Lines R, Cook C. Out of Sight, Out of Mind: Harm reduction in prisons and other places of detention. *Global State of Harm Reduction 2010: Key Issues for Broadening the Response*. London: International Harm Reduction Association; 2010.
20. Australian Institute of Health and Welfare. The Health of Australia's Prisoners 2012 Canberra: AIHW; 2013.
21. Rodas A, Bode A, Dolan K. Supply, demand and harm reduction strategies in Australian prisons: an update; ANCD Research Paper 23. Canberra: Australian National Council on Drugs 2012.
22. Wodak A, Cooney A. Do needle syringe programs reduce HIV infection among injecting drug users: a comprehensive review of the international evidence. *Substance use & misuse*. 2006;41(6-7):777-813.
23. Aspinall EJ, Nambiar D, Goldberg DJ, Hickman M, Weir A, Van Velzen E, et al. Are needle and syringe programmes associated with a reduction in HIV transmission among people who inject drugs: a systematic review and meta-analysis. *International journal of epidemiology*. 2014;43(1):235-48.

24. Kimber J, Palmateer N, Hutchinson S, Hickman M, Goldberg D, Rhodes T. Harm reduction among injecting drug users-evidence of effectiveness. 2010. In: Harm reduction: evidence, impacts and challenges [Internet]. Luxembourg: Publications Office of the European Union; [115-63].
25. Stöver H, Hariga F. Prison-based needle and syringe programmes (PNSP) – Still highly controversial after all these years. *Drugs: Education, Prevention and Policy*. 2016;23(2):103-12.
26. Dolan K, Rutter S, Wodak AD. Prison-based syringe exchange programmes: a review of international research and development. *Addiction*. 2003;98(2):153-8.
27. Lines R, Jürgens R, Betteridge G, Stöver H, Laticevschi D, Nelles J. Prison needle exchange: lessons from a comprehensive review of international evidence and experience. Montréal, Québec: Canadian HIV/AIDS Legal Network; 2004.
28. Niveau G, Public Health. Prevention of infectious disease transmission in correctional settings: A review. *Public Health Reviews*. 2005;120(1):33-41.
29. Rutter S, Dolan K, Wodak A, Heilpern H. Prison-based syringe exchange programs: a review of international research and program development. Sydney, NSW: National Drug & Alcohol Research Centre, UNSW; 2001.
30. Stöver H, Nelles J. Ten years of experience with needle and syringe exchange programmes in European prisons. *International Journal of Drug Policy*. 2003;14(5-6):437-44.
31. Medley A, Kennedy C, O'Reilly K, Sweat M. Effectiveness of peer education interventions for HIV prevention in developing countries: a systematic review and meta-analysis. *AIDS education and prevention : official publication of the International Society for AIDS Education*. 2009;21(3):181-206.
32. Garfein RS, Golub ET, Greenberg AE, Hagan H, Hanson DL, Hudson SM, et al. A peer-education intervention to reduce injection risk behaviors for HIV and hepatitis C virus infection in young injection drug users. *Aids*. 2007;21(14):1923-32.
33. Doyle MF, Williams M, Butler T, Shakeshaft A, Conigrave K, Guthrie J. Perspectives of prisoners on alcohol and other drug group treatment approaches. *Int J Prison Health*. 2021;ahead-of-print(ahead-of-print).
34. Bagnall A-M, South J, Hulme C, Woodall J, Vinall-Collier K, Raine G, et al. A systematic review of the effectiveness and cost-effectiveness of peer education and peer support in prisons. *BMC public health*. 2015;15(1):290.

35. Devilly GJ, Sorbello L, Eccleston L, Ward T. Prison-based peer-education schemes. *Aggression and Violent Behavior*. 2005;10(2):219-40.
36. Goldstein EH, Warner-Robbins C, McClean C, Macatula L, Conklin R. A peer-driven mentoring case management community reentry model: an application for jails and prisons. *Family & community health*. 2009;32(4):309-13.
37. Braithwaite RL, Stephens TT, Treadwell HM, Braithwaite K, Conerly R. Short-term impact of an HIV risk reduction intervention for soon-to-be released inmates in Georgia. *Journal of health care for the poor and underserved*. 2005;16(4 Suppl B):130-9.
38. Dolan KA, Bijl M, White B. HIV education in a Siberian prison colony for drug dependent males. *International Journal for Equity in Health*. 2004;3(1):7.
39. Ross MW, Harzke AJ, Scott DP, McCann K, Kelley M. Outcomes of Project Wall Talk: an HIV/AIDS peer education program implemented within the Texas State Prison system. *AIDS Education & Prevention*. 2006;18(6):504-17.
40. Perry AE. Pharmacological interventions for drug-using offenders. *Cochrane Database of Systematic Reviews*. 2014(1).
41. Dolan K, Shearer J, White B, Zhou J, Kaldor J, Wodak A. Four-year follow-up of imprisoned male heroin users and methadone treatment: mortality, re-incarceration and hepatitis C infection. *Addiction*. 2005;100:820-8.
42. Perry AE, Neilson M, Martyn-St James M, Glanville JM, Woodhouse R, Godfrey C, et al. Pharmacological interventions for drug-using offenders. *Cochrane Database of Systematic Reviews*. 2015; Issue 6. Art. No.: CD010862..CD010862.
43. Binswanger IA, Blatchford PJ, Mueller SR, Stern MF. Mortality After Prison Release: Opioid Overdose and Other Causes of Death, Risk Factors, and Time Trends From 1999 to 2009. *Annals of Internal Medicine*. 2013;159(9):592-600.
44. Merrall ELC, Kariminia A, Binswanger IA, Hobbs MS, Farrell M, Marsden J, et al. Meta-analysis of drug-related deaths soon after release from prison. *Addiction*. 2010;105(9):1545-54.
45. Larney S, Toson B, Burns L, Dolan K. Opioid substitution treatment in prison and post-release: Effects on criminal recidivism and mortality. National Drug Law Enforcement Research Fund, Monograph Series No. 37.; 2011.

46. Brinkley-Rubinstein L, McKenzie M, Macmadu A, Larney S, Zaller N, Dauria E, et al. A randomized, open label trial of methadone continuation versus forced withdrawal in a combined US prison and jail: Findings at 12 months post-release. *Drug Alcohol Depend.* 2018;184:57-63.
47. Gowing L, Ali R, Dunlop A, Farrell M, Lintzeris N. *National Guidelines for Medication-Assisted Treatment of Opioid Dependence.* Canberra: Australian Government Department of Health; 2014.
48. Victorian Auditor-General. *Prevention and Management of Drug Use in Prisons.* Victoria Victorian Auditor General's Office; 2013.
49. Moore KE, Oberleitner L, Smith KMZ, Maurer K, McKee SA. Feasibility and Effectiveness of Continuing Methadone Maintenance Treatment During Incarceration Compared With Forced Withdrawal. *J Addict Med.* 2018;12(2):156-62.
50. Larney S, Toson B, Burns L, Dolan K. Effect of prison-based opioid substitution treatment and post-release retention in treatment on risk of re-incarceration. *Addiction.* 2012;107(2):372-80.
51. Malta M, Varatharajan T, Russell C, Pang M, Bonato S, Fischer B. Opioid-related treatment, interventions, and outcomes among incarcerated persons: A systematic review. *PLoS Med.* 2019;16(12):e1003002.
52. Hedrich D, Alves P, Farrell M, Stover H, Moller L, Mayet S. The effectiveness of opioid maintenance treatment in prison settings: a systematic review. *Addiction.* 2012;107(3):501-17.
53. Perry A, Neilson M, Martyn-St Jame M, Glanville JM, Woodhouse R, Godfrey C, et al. Interventions for drug using offenders with co-occurring mental illness. *Cochrane Database of Systematic Reviews* 2015; Issue 6. Art. No.: CD010901(DOI:10.1002/14651858.CD010901.pub2).
54. Lipsey MW, Landenberger NA, Wilson SJ. *Effects of Cognitive-Behavioral Programs for Criminal Offenders.* The Campbell Collaboration 2007.
55. McMurran M. What works in substance misuse treatments for offenders? *Criminal Behaviour & Mental Health.* 2007;17(4):225-33.
56. Hall EA, Prendergast ML, Wellisch J, Patten M, Cao Y. Treating drug-abusing women prisoners: An outcomes evaluation of the forever free program. *Prison Journal.* 2004;84(1):81-105.
57. Pelissier B, Motivans M, Rounds-Bryant JL. Substance abuse treatment outcomes: A multi-site study of male and female prison programs. *Journal of Offender Rehabilitation.* 2005;41(2):57-80.

58. Pelissier B, Wallace S, O'Neil JA, Gaes GG, Camp S, Rhodes W, et al. Federal prison residential drug treatment reduces substance use and arrests after release. *The American journal of drug and alcohol abuse*. 2001;27(2):315-37.
59. Doyle MF, Shakeshaft A, Guthrie J, Snijder M, Butler T. A systematic review of evaluations of prison-based alcohol and other drug use behavioural treatment for men. *Aust N Z J Public Health*. 2019;43(2):120-30.
60. Kevin M. Corrections Treatment Outcome Study (CTOS) on offenders in drug treatment: Results from the Drug Summit demand reduction residential programs. Corporate Research, Evaluation and Statistics, Corrective Services NSW; 2011.
61. Commonwealth of Australia. Final Report of the National Ice Taskforce. Department of the Prime and Cabinet, Commonwealth of Australia; 2015.
62. Corrective Services New South Wales. Compendium of Correctional Programs in New South Wales Sydney, NSW.: Corrective Services New South Wales; 2013.
63. Queensland Corrective Services. Information for staff and stakeholders - Pathways: High intensity substance abuse program 2009
64. Heseltine K, Day A, Sarre R. Prison-based correctional offender rehabilitation programs: The 2009 national picture in Australia. Canberra Australian Institute of Criminology 2011. Report No.: AIC Reports Research and Public Policy Series 112.
65. Government of Western Australia. Recidivism rates and the impact of treatment programs. W.A.: Office of the Inspector of Custodial Services, ; 2014.
66. Aydin E, Kevin M, Xie Z, Perry M. Evaluation of the Getting SMART Program: Factors impacting program completion. Sydney: Corrections Research, Evaluation and Statistics, Corrective Services NSW; 2013.
67. Bahr SJ, Harris PE, Strobell JH, Taylor BM. An evaluation of a short-term drug treatment for jail inmates. *International journal of offender therapy and comparative criminology*. 2013;57(10):1275-96.
68. Chiesa A, Serretti A. Are mindfulness-based interventions effective for substance use disorders? A systematic review of the evidence. *Substance use & misuse*. 2014;49(5):492-512.
69. Zgierska A, Rabago D, Chawla N, Kushner K, Koehler R, Marlatt A. Mindfulness meditation for substance use disorders: a systematic review. *Substance abuse : official publication of the Association for Medical Education and Research in Substance Abuse*. 2009;30(4):266-94.

70. Bowen S, Chawla N, Marlatt G. Mindfulness-based relapse prevention for addictive behaviors: A clinician's guide. 2011.
71. Bowen S, Witkiewitz K, Dillworth TM, Chawla N, Simpson TL, Ostafin BD, et al. Mindfulness meditation and substance use in an incarcerated population. *Psychology of Addictive Behaviors*. 2006;20(3):343-7.
72. Lee K, Bowen S, Bai AF. Psychosocial outcomes of mindfulness-based relapse prevention in incarcerated substance abusers in Taiwan: A preliminary study. *Journal of Substance Abuse*. 2011.
73. Witkiewitz K, Warner K, Sully B, Barricks A, Stauffer C, Thompson BL, et al. Randomized trial comparing mindfulness-based relapse prevention with relapse prevention for women offenders at a residential addiction treatment center. *Substance use & misuse*. 2014;49(5):536-46.
74. Grant S, Hempel S, Colaiaco B, Aneesa Motala RMS, Marika Booth, Whitney Dudley and Melony E. Sorbero. M. . Mindfulness-Based Relapse Prevention for Substance Use Disorders: A Systematic Review. 2015.
75. Grant S, Colaiaco B, Motala A, Shanman R, Booth M, Sorbero M, et al. Grant, S., Colaiaco, B., Motala, A., Shanman, R., Booth, M., Sorbero, M., & Hempel, S. (2017). Mindfulness-based Relapse Prevention for Substance Use Disorders: A Systematic Review and Meta-analysis. *Journal of Addiction Medicine*, 11(5), 386–396. *Journal of Addiction Medicine*. 2017;11(5): 386–96.
76. Prendergast M, Podus D, Finney J, Greenwell L, Roll J. Contingency management for treatment of substance use disorders: A meta-analysis. *Addiction*. 2006;101(11):1546-60.
77. Gendreau P, Listwan SJ, Kuhns JB, Exum ML. Making Prisoners Accountable: Are Contingency Management Programs the Answer? *Criminal justice and behavior*. 2014;41(9):1079-102.
78. Marlowe DB, Festinger DS, Dugosh KL, Arabia PL, Kirby KC. An Effectiveness Trial of Contingency Management in a Felony Preadjudication Drug Court. *Journal of Applied Behavior Analysis*. 2008;41(4):565-77.
79. Rudes DS, Taxman FS, Portillo S, Murphy A, Rhodes A, Stitzer M, et al. Adding positive reinforcement in justice settings: Acceptability and feasibility. *Journal of substance abuse treatment*. 2012;42(3):260-70.
80. Birgden A, Grant L. Establishing a compulsory drug treatment prison: Therapeutic policy, principles, and practices in addressing offender rights and rehabilitation. *International journal of law and psychiatry*. 2010;33(5-6):341-9.

81. Miller WR, Rollnick S. *Motivational Interviewing: Preparing people to change* (second edition). New York: Guilford Press; 2002.
82. Lundahl B, Burke BL. The effectiveness and applicability of motivational interviewing: a practice-friendly review of four meta-analyses. *Journal of Clinical Psychology*. 2009;65(11):1232-45.
83. McMurran M. Motivational interviewing with offenders: A systematic review. *Legal and Criminological Psychology*. 2009;14(1):83-100.
84. Kouyoumdjian FG, McIsaac KE, Liauw J, Green S, Karachiwalla F, Siu W, et al. A systematic review of randomized controlled trials of interventions to improve the health of persons during imprisonment and in the year after release. *Am J Public Health*. 2015;105(4):e13-33.
85. Begun AL, Rose SJ, Lebel TP. Intervening with women in jail around alcohol and substance abuse during preparation for community reentry. *Alcoholism Treatment Quarterly*. 2011;29(4):453-78.
86. Mitchell O, Wilson DB, MacKenzie DL. The Effectiveness of Incarceration-Based Drug Treatment on Criminal Behavior: A Systematic Review. *Campbell Systematic Reviews*. 2012;18.
87. Beaudry G, Yu R, Perry AE, Fazel S. Effectiveness of psychological interventions in prison to reduce recidivism: a systematic review and meta-analysis of randomised controlled trials. *Lancet Psychiatry*. 2021;8(9):759-73.
88. Galassi A, Mpofu E, Athanasou J. Therapeutic Community Treatment of an Inmate Population with Substance Use Disorders: Post-Release Trends in Re-Arrest, Re-Incarceration, and Drug Misuse Relapse. *International journal of environmental research and public health*. 2015;12(6):7059-72.
89. Welsh WN, Zajac G, Bucklen KB. For whom does prison-based drug treatment work? Results from a randomized experiment. *Journal of Experimental Criminology*. 2013;10(2):151-77.
90. Humphreys K, Wing S, McCarty D, Chappel J, Gallant L, Haberle B, et al. Self-help organizations for alcohol and drug problems: toward evidence-based practice and policy. *J Subst Abuse Treat*. 2004;26(3):151-8; discussion 9-65.
91. Kelly JF, Yeterian JD. The role of mutual-help groups in extending the framework of treatment. *Alcohol Research & Health*. 2011;33(4):350.
92. Pearson SF, Lipton DS. A Meta-Analytic Review of the Effectiveness of Corrections-Based Treatments for Drug Abuse. *The Prison Journal* 1999;79(4):384-410.

93. Grella CE, Cochran SD, Greenwell L, Mays VM. Effects of sexual orientation and gender on perceived need for treatment by persons with and without mental disorders. *Psychiatric services*. 2011;62(4):404-10.
94. Simpson M, McNulty J. Different needs: women's drug use and treatment in the UK. *The International journal on drug policy*. 2008;19(2):169-75.
95. Pollard J, Kiehne M. The changing relationship between Substance Use and Offending in Victorian prisoners. *APS Forensic Conference 2015*; Sydney: Caraniche; 2015.
96. Willis K, Rushforth C. *The Female Criminal: An Overview of Women's Drug Use and Offending Behaviour*. Canberra: Australian Institute of Criminology; 2003.
97. Perry AE, Neilson M, Martyn-St James M, Glanville JM, McCool R, Duffy S, et al. Interventions for female drug-using offenders. *COCHRANE DATABASE OF SYSTEMATIC REVIEWS*. 2014(1).
98. Kissin WB, Tang Z, Campbell KM, Claus RE, Orwin RG. Gender-Sensitive Substance Abuse Treatment and Arrest Outcomes for Women. *Journal of substance abuse treatment*. 2014;46(3):332-9.
99. Tripodi SJ, Bledsoe SE, Kim JS, Bender K. Effects of correctional-based programs for female inmates: A systematic review. *Research on Social Work Practice*. 2011;21(1):15-31.
100. Hall MT, Golder S, Conley CL, Sawning S. Designing Programming and Interventions for Women in the Criminal Justice System. *Am J Crim Just*. 2013;38(1):27-50.
101. Sacks JY, McKendrick K, Hamilton Z. A randomized clinical trial of a therapeutic community treatment for female inmates: outcomes at 6 and 12 months after prison release. *Journal of addictive diseases*. 2012;31(3):258-69.
102. Houser KA, Blasko BL, Belenko S. The effects of treatment exposure on prison misconduct for female prisoners with substance use, mental health, and co-occurring disorders. *Criminal Justice Studies*. 2014;27(1).
103. Grella CE, Rodriguez L. Motivation for treatment among women offenders in prison-based treatment and longitudinal outcomes among those who participate in community aftercare. *Journal of psychoactive drugs*. 2011;Suppl 7:58-67.
104. Commonwealth of Australia (Department of Health). *National Drug Strategy 2017-2026*. Canberra; 2017.

105. Wilkes ET, Gray D, Casey W, Stearne A, Dadd L. Harmful Substance Use and Mental Health. In: Dudgeon P, Milroy H, Walker R, editors. Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice (2nd ed). Canberra: Commonwealth of Australia, Canberra; 2014. p. 125-46.
106. National Indigenous Drug Alcohol Committee. Bridges and barriers: addressing Indigenous incarceration and health: revised edition. Canberra: Australian National Council on Drugs; 2013. p. iii, 20 p.
107. Gray D, Stearne A, Wilson M, Doyle M. Indigenous-specific alcohol and other drug interventions: continuities, changes and areas of greatest need. Australian National Council on Drugs: National Drug Research Institute, Curtin University; 2010.
108. Dolan K, Rodas A, Bode A. Drug and alcohol use and treatment for Australian Indigenous and non-Indigenous prisoners : demand reduction strategies. International journal of prisoner health. 2015;11(1):30-8.
109. Lee K FB, Ella S, Miller W, Perry J, Conigrave K [editors]. Handbook for Aboriginal Alcohol and Drug Work. Sydney: University of Sydney; 2012. 446 p.
110. National Indigenous Drug and Alcohol Committee. Alcohol and other drug treatment for Aboriginal and Torres Strait Islander peoples. Canberra: Australian National Council on Drugs; 2014.
111. National Indigenous Drug and Alcohol Committee. Alcohol and other drug treatment for Aboriginal and Torres Strait Islander peoples. Canberra: Australian National Council on Drugs; 2014.
112. Ogloff J, Davis MR, Rivers G, Ross S. The identification of mental disorders in the criminal justice system. Trends and issues in crime and criminal justice No 334. Canberra: Australian Institute of Criminology 2007.
113. Perry AE, Neilson M, Martyn-St James M, Glanville JM, McCool R, Duffy S, et al. Interventions for drug-using offenders with co-occurring mental illness. COCHRANE DATABASE OF SYSTEMATIC REVIEWS. 2014(1).
114. Dye MH, Ducharme LJ, Johnson JA, Knudsen HK, Roman PM. Modified Therapeutic Communities and Adherence to Traditional Elements. Journal of psychoactive drugs. 2009;41(3):275-83.
115. Sacks S, Chaple M, Sacks JY, McKendrick K, Cleland CM. Randomized trial of a reentry modified therapeutic community for offenders with co-occurring disorders: Crime outcomes. 2012. p. 247-59.

116. Stein LA, Clair M, Lebeau R, Colby SM, Barnett NP, Golembeske C, et al. Motivational interviewing to reduce substance-related consequences: effects for incarcerated adolescents with depressed mood. *Drug Alcohol Depend.* 2011;118(2-3):475-8.
117. Victorian Ombudsman. Investigation into the rehabilitation and reintegration of prisoners in Victoria. Victorian; 2015.
118. Kutin J, Bruun A, Mitchell P, Daley K, Best D. Snapshot: SYNC Results: Young people in AOD services in Victoria. Summary Data and Key Findings. Melbourne, Australia: Youth Support and Advocacy Service; 2014.
119. Australian Institute of Health and Welfare. The health of Australia's prisoners 2015. Canberra: Australian Institute of Health and Welfare 2015.
120. Sentencing Advisory Council. Reoffending Following Sentencing in the Magistrates' Court of Victoria. Melbourne: Sentencing Advisory Council; 2013.
121. Janopaul-Naylor E, Brown JD, Lowenhaupt EA, Tolou-Shams M. Assessment and treatment of substance abuse in the juvenile justice population. *Adolesc Med State Art Rev.* 2014;25(1):215-29.
122. Lipsey M. The Primary Factors that Characterize Effective Interventions with Juvenile Offenders: A Meta-Analytic Overview. *Victims & Offenders.* 2009;4:124-47.
123. James C, Stams GJJ, Asscher JJ, De Roo AK, van der Laan PH. Aftercare programs for reducing recidivism among juvenile and young adult offenders: A meta-analytic review. *Clinical Psychology Review.* 2013;33(2):263-74.
124. Department of Justice & Regulation. Key Statistics on the Victorian Prison System 2009–10 to 2013–14. Melbourne: Corrections Victoria; 2015.
125. Jaffe M. Peer support and seeking help in prison: a study of the Listener scheme in four prisons in England: Keele University; 2012.
126. Royal College of Psychiatrists. Alcohol and brain damage in adults With reference to high-risk groups. London: Royal College of Psychiatrists; 2014.
127. Stooze M, Kirwan A. External component of the evaluation of drug policies and services and their subsequent effects on prisoners and staff within the Alexander Maconochie Centre : final report Melbourne: Burnet Institute; 2010. p. 197 p.



360edge.