This entry is our analysis of a review or synthesis of research findings considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original review was not published by Findings; click Title to order a copy. Links to other documents. Hover over for notes. Click to highlight passage referred to. Unfold extra text The Summary conveys the findings and views expressed in the review. Below is a commentary from Drug and Alcohol Findings.

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▶ The effectiveness of incarceration-based drug treatment on criminal behavior: A systematic review.

Mitchell O., Wilson D.B., MacKenzie D.L. Campbell Systematic Reviews: 2012, 18



Strongest support for 'therapeutic community' approach to incarceration-based drug treatment according to robust review of evidence – with consistent reductions found in both drug relapse and recidivism.

SUMMARY Many (if not most) offenders in prison have substance use problems, and without effective treatment, are likely to persist in their offending behaviours.

Prison offers an opportunity to intervene in the cycle of drug use and crime. Though many types of incarceration-based drug treatment programmes are available, the effectiveness of these programmes is unclear.

This analysis synthesised results from randomised and non-randomised evaluations of four types of incarceration-based drug treatment programme. [The terminology used to describe people participating in incarceration-based drug treatments can differ from programme-to-programme, for example ranging from client, to resident, to inmate. What follows reflects the language used in the featured paper.]

• Therapeutic communities vary widely, yet several components appear to be common. Residents in therapeutic communities are most commonly housed in a separate, distinct treatment unit away from non-participating inmates. Residents are involved in the day-to-day running of the therapeutic community. Though staff and residents of therapeutic communities are encouraged to confront residents who break rules,



Four types of incarceration-based drug treatment programme are reviewed for their effectiveness in reducing post-release recidivism and drug relapse: therapeutic communities; group counselling; boot camps; and narcotic maintenance.

The evidence most strongly supports the effectiveness of therapeutic communities – these producing relatively consistent reductions in both recidivism and drug use.

Policy makers are most likely to find success with programmes that intensively focus on the multiple problems of substance users, and should expect smaller treatment benefits from less intensive treatment programmes.

residents are also supportive of each other's struggles to make positive changes. And the guiding philosophy of therapeutic communities is that drug use is symptomatic of other underlying issues, so treatment considers psychological and social issues, and not the drug use in isolation.

- **Group counselling**. As well as addiction-focused counselling, may include life skills training, cognitive skills training, drug education, and basic adult education. Substance use and other common problems are discussed among peers in an effort to solve mutual issues.
- **Boot camps** are highly structured, modelled after military training where inmates participate in rigorous exercise regimens, learn military drill and ceremony, wear uniforms, and participate in timed obstacle courses. Residents are constantly engaged in scheduled activities. Boots camps involve considerable confrontation, but unlike most therapeutic community programmes, confrontations mostly occur between staff and inmates. In theory, boot camps serve as a deterrent to future criminal conduct, and the content of these programmes instils self-discipline,

which also leads to reduced recidivism.

• **Narcotic maintenance programmes** differ from other types of incarceration-based drug treatment programmes, attempting to reduce the harms associated with heroin dependence by prescribing synthetic opioid medication. Some long-term treatments gradually reduce the amount of medication administered to the client until the opiate dependence is relieved; other programmes maintain clients indefinitely.

The study's aims were to determine programme effectiveness in reducing post-release offending (recidivism) and drug relapse, and to examine whether differences could be explained by variations in methodology, sample, or programme features.

There were 74 eligible studies, conducted between 1980 and 2011 This publication is an update of a 2006 review.

Main findings

All but one of the studies reported on recidivism, but only 22 of 74 studies assessed the effect of drug treatment on post-release drug use. The overwhelming majority were conducted in the United States (65), four evaluations were conducted in Canada, three in Australia, one in the United Kingdom, and one in Taiwan.

The overall effect of incarceration-based drug treatment programmes was a 15–17% reduction in recidivism and drug relapse.

The average rate of recidivism across comparison groups was 35%, and in treatment groups 29%. This meant that participation in treatment was associated with a 17% reduction in recidivism.

Similarly, the average rate of drug relapse across comparison groups was 35%, and in treatment groups 30%, which suggested that participation in treatment was associated with a 15% reduction in drug relapse. This calculation was not statistically significant, but may have been 'underpowered' due to the scarcity of studies reporting this outcome.

Effectiveness varied by programme type:

- Therapeutic communities had relatively consistent but modest reductions in recidivism and drug relapse. Evaluations of therapeutic communities programmes found statistically significant reductions in recidivism which translated into a 28% recidivism rate for participants compared to 35% for the comparison group.
- Counselling programmes on average reduced recidivism but not drug relapse. Evaluations of counselling programmes found statistically significant reductions in recidivism which translated into a 26% recidivism rate, again compared to 35% for the comparison group.
- Narcotic maintenance programmes were followed by sizeable reductions in drug relapse but not recidivism. Participants in narcotic programmes were significantly more likely to re-offend than comparison offenders, but when one negative outlier was removed, this effect diminished and became statistically insignificant.
- Boot camps had negligible effects on both recidivism and drug relapse. Only two evaluations of boot camp programmes for drug offenders could be included in the featured review.

The authors' conclusions

Incarceration-based drug treatment programmes seem to be modestly effective in reducing recidivism. The evidence most strongly supports the effectiveness of therapeutic communities, which produced relatively consistent reductions in recidivism and drug use.

There is uncertainty about the magnitude of effect on recidivism from narcotic maintenance programmes. Existing evidence does not suggest that such programmes would typically reduce recidivism substantially.

Based on the wider literature, there is no evidence that correctional boot camps targeted at substance users reduce either post-release offending or drug use, and therefore, policy makers should not expect such programmes to reduce recidivism.

Policymakers seeking effective interventions for incarcerated substance abusers are most likely to find success with programmes that intensively focus on the multiple problems of people with substance use problems, such as therapeutic communities. Policy makers should expect smaller treatment benefits from less intensive treatment programmes.

FINDINGS COMMENTARY Therapeutic communities came out on top in this review, with evaluations showing their effectiveness across a range of sample types. The authors concluded from the results that policy makers would be most likely to find success with programmes that

intensively focus on the multiple problems of substance users (such as therapeutic communities), and should expect smaller treatment benefits from less intensive treatment programmes.

However, according to the authors "only two evaluations employed an experimental design that randomly assigned offenders to treatment conditions". This means that the remaining studies – including those on which the above conclusions hinged – could have been subject to a form of 'selection bias', whereby some kinds of people within the population were more likely to be included than others. This would perhaps have been most apparent in the studies that required all participants to *volunteer* for treatment.

The expectation of greater benefit from more intensive programmes such as therapeutic communities was not based on a direct and rigorous comparison. When one was conducted in the form of a randomised trial comparing intensive residential therapeutic community treatment with less intensive outpatient counselling, it failed to find expected benefits from the intensive option. It also found no evidence in support of the (otherwise well-evidenced) risk-need-responsivity framework that inmates at higher risk of reoffending would do better in more intensive interventions (click to unfold a description of the framework). They gathered from this that the most intensive intervention is not always the most effective (or appropriate) for those with the highest level of reoffending risk.

From the above randomised trial, other factors seem to be important, especially for interventions such as therapeutic communities which entail intensive interaction and confrontation, and may mean such interventions are not appropriate for all high-risk prisoners. Responsivity factors such as negative affect, cognitive limitations, interpersonal skills, prior treatment history, may dictate something other than an intensive therapeutic community programme for a particular high-risk prisoner at a particular time. Therapeutic community participants who were high in reoffending risk and negative affect had significantly higher reimprisonment rates than their counterparts in outpatient treatment. Such prisoners may be poor candidates for a therapeutic community and do better in less intensive regimens.

The characteristics of samples in the featured review were investigated for their moderating effects on the treatment programmes, and indeed none were statistically or substantially associated with effect size. Interestingly though, evaluations that used all female samples had statistically higher odds of reducing recidivism and/or drug relapse when involved in treatment than either all male samples, or mixed-sex samples. Though no information was given on the nature of the treatment offered to these gender-specific or mixed-sex samples, research indicates that women may benefit from programmes specifically tailored to issues commonly affecting women in the criminal justice system, for example around motherhood, trauma and abuse, sexuality, and body image.

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