

Interventions for drug-using offenders in the courts, secure establishments and the community. (Review)

Perry A, Coulton S, Glanville J, Godfrey C, Lunn J, McDougall C, Neale Z



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[Intervention Review]

Interventions for drug-using offenders in the courts, secure establishments and the community.

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ABSTRACT

Background

Drug strategies internationally recognize link between drug use and crime. This review consider interventions for drug-using offenders under the care of the criminal justice system.

Objectives

To assess the effectiveness of interventions for drug-using offenders in reducing criminal activity and drug use in the courts, secure establishments and community-based settings.

Search methods

Twenty two electronic databases were searched (1980 to 2004). Internet sites and experts in the field were contacted for further information.

Selection criteria

Randomised Controlled Trials designed to reduce, eliminate or prevent relapse in drug using offenders

Data collection and analysis

Two authors independently assessed trials for inclusion. Data were extracted by one author and double checked.

Main results

Twenty four studies, 8936 participants, met the inclusion criteria. Results show that comparing a court-based community pre-trial release with drugs testing and sanctions versus routine pre-trial, for arrest at 90 days results favoured the comparison group OR 1.33 (95% CI 1.04 to 1.70). Comparing therapeutic community with aftercare with a mental health programme with a waiting list control, considering incarceration at 12 months OR 0.37 (95% CI 0.16 to 0.87), results in favour of the treatment Comparing intensive supervision with routine parole/probation, for recidivism OR 1.98 (95% CI 1.01 to 3.87) results in favour of comparison group, no

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statistically significant difference between the groups for arrest OR 1.49 (95% CI 0.88 to 2.51), drug arrest OR 1.10 (95% CI 0.50 to 2.39), conviction OR 0.93 (95% CI 0.55 to 1.58) and incarceration at one year OR 0.88 (95% CI 0.50, 1.54). Comparing intensive supervision and increased surveillance with intensive supervision alone, no statistically significant difference between the groups for recidivism OR 2.09 (95% CI, 0.86 to 5.07), arrest OR 1.22 (95% CI 0.51 to 2.88)], drug arrest, OR 1.29 (95% CI 0.35 to 4.85), conviction OR 0.114 (95% CI, 0.22, to 5.91) and incarceration OR 1.30 (95% CI 0.39, to 4.30)] at one year.

Authors' conclusions

Limited conclusions can be drawn about the effectiveness of drug treatment programmes for drug-using offenders in the courts or the community. This is partly due to the broad range of studies and the heterogeneity of the different outcome measures presented. Therapeutic communities with aftercare show promising results for the reduction of drug use and criminal activity in drug using offenders. Standardisation of outcome measures and costing methodology would help improve the quality of research conducted in the area.

PLAIN LANGUAGE SUMMARY

Therapeutic communities with aftercare in secure settings may reduced drug misuse and criminal activity.

A number of policy directives are aimed at enabling people with drug problems to live healthy, crime free lives. Drug-using offenders naturally represent a socially excluded group who may experience problems in relation to their drug use. A number of studies and previous systematic reviews have considered the effectiveness of drug treatment interventions for drug misusers in the *general* population, mixed populations of offenders and non-offenders, drug treatment in a specific setting or country with limited outcome measures. This review focuses on drug treatment for offenders across a number of different settings. A number of studies have been conducted displaying a wide range of outcome measures with varying methodological quality. Little information is provided on the costs and cost-effectiveness of such interventions. Promising results are shown for therapeutic communities with aftercare.

BACKGROUND

National drug strategies in countries worldwide recognize the link between drug use and crime, and consequently acknowledge the role of the criminal justice system in implementing policies. All of the European Union members' national strategies that are outlined in the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA 2002) review consider treatment interventions in the criminal justice system. Similarly the Australian National Drug Strategy (Australian Gov 2004) aims to 'improve access to treatment programmes and services (including diversion programmes) in the criminal justice system' (Australian Gov 2004, p.8). To demonstrate how national strategies influence criminal justice system approaches, a more detailed description is presented, using current policy initiatives developed in England and Wales.

One of the four overarching aims of the UK National Drug Strategy (Home Office 1999) is to enable people with drug problems to live healthy, crime-free lives by increasing the participation of problem drug misusers (including offenders), in drug treatment programmes. A further strategy target is to reduce levels of repeat offending amongst drug-misusing offenders by 25% by 2005 and

50% by 2008. In England Drug Action Teams (DAT) work towards these targets, identifying people with drug misuse problems in the criminal justice system and providing them with a mechanism for treatment via such schemes as Arrest Referral and Drug Treatment and Testing Orders (DTTO).

More recently, the Updated National Drug Strategy of September 2004 (*see* www.drugs.gov.uk/ReportsandPublications/NationalStrategy/1038840683) introduced the Drug Interventions Programme. Formerly known as the Criminal Justice Interventions Programme (CJIP) the strategy aims to take advantage of opportunities within the criminal justice system by tracking drug-misusing offenders, many of whom are difficult to access by other approaches and, by doing so, moving them away from drug use and crime.

This beginning-to-end support system supports the new Criminal Justice Act (Nat Probation 2004), which focuses on a unified offender management process, joining both Prison and Probation Services together through the National Offender Management Service (NOMS). Similar alliances have also been developed between the National Health Service (NHS) and the HM Prison

Service with the introduction in England and Wales of the Future Organisation of Prison Healthcare (NHS/HMP 1999) and the Research and Development Strategy for Public Health for England and Wales (DOH 2001). These policies acknowledge the need to target specifically vulnerable and socially excluded groups, such as drug-misusing offenders. It is further suggested that such inequalities in healthcare should be reduced by the identification of best practice and proven effectiveness, however there is little research to-date that has reported on systematic evaluations of drug treatment programs for offenders in the UK and internationally.

The following section provides a brief overview of the current research describing: 1) the health and social inequalities between prisoners and the general population, 2) the use of treatment programmes for substance misuse and 3) current studies which have assessed drug treatment interventions for offenders.

Regardless of whether offenders are in prison or not, they naturally represent a socially excluded group. One of the many differences identified between offenders and the general population is in relation to drug use and subsequent health problems. Studies that have looked at the prevalence of drug dependence in UK prisons have reported between 10% (Gunn 1991) and 39% (Brooke 1996); in the general population it is known to be much lower. This work is supported by a further study (Mason 1997) which evaluated a consecutive sample of 548 remand prisoners who were comprehensively screened for substance misuse; 382 (70%) gave a history of illicit drug use at some point in their lives, with 33% reaching the current misuse or dependency criteria. Similar trends have been reported in many countries, and in the US it is recognised that many offenders are in need of treatment to tackle their drug use (Lo 2000). Whilst these health problems are well documented there has been little emphasis to date on the proven systematic effectiveness of current treatment programmes specifically for offenders (McMurran 2000; Shaw 2000).

There are wide ranges of different treatments for substance misuse. These include: detoxification, maintenance prescription, antagonist prescription, therapeutic communities, motivational enhancement therapy, counselling and psychotherapy, cognitive-behavioural therapies, family relationship therapies, community reinforcement and combinations of the above. Many of these programmes have been traditionally used with drug-misusers in the community and have been adopted for use in the criminal justice system.

Some treatment programmes, such as cognitive-behavioural approaches, including self-monitoring, goal setting, self-control training, interpersonal skills training, relapse prevention, group work and lifestyle modification have shown signs of success with offenders (Baldwin 1991; Day 1993; Little 1991; Peters 1992; Platt 1980; Shewan 1996). Furthermore, evidence suggests that the effectiveness of drug treatment is directly related to the length of time an individual remains in treatment, and whether the of-

fender enters voluntarily or under some form of coercion (Anglin 1990; Anglin 1992; Falkin 1992).

Despite these findings two reports (McMurran 2000; Shaw 2000) suggested that the treatment of drug withdrawal and other treatment interventions for offenders are inadequate for this specific population and we still require information to assess:

- (1) What works best (i.e. treatment type, intensity and duration)?
- (2) With whom, and with what types of substance?
- (3) With what client characteristics (e.g., age, gender, ethnicity)?
- (4) Under what conditions (i.e. prisons, special hospitals, probation in the community, arrest referral schemes, diversion from court)?

More recently international concerns have focused on the cost and cost-effectiveness of such interventions, and whether they are effective in reducing both criminal activity and drug-use. Some evidence can be drawn from systematic reviews completed in the area. These have concentrated on: (1) specific drug treatments for the general population, (2) drug treatments more generally for a mixed population (i.e., contains offenders and non-offenders), (3) drug treatments for offenders in a specific setting (4) drug treatments for offenders, but limited to a specific country (5) outcome measures.

Specific drug treatments for the general population and drug treatments for generally mixed populations have concentrated on: naltrexone maintenance treatment for opioid dependence, the efficacy of methadone maintenance, and drug abuse treatment of comparison group studies (Marsch 1998; Minozzi 2006; Prendergast 2002). These reviews do not however, focus specifically on offenders under the care of the criminal justice system.

Systematic reviews that have been completed on offender populations or in correctional settings have been limited to focusing on either one setting area such as community-based programs, corrections-based and out-patient treatment (Chanhatasilpa 2000; Mitchell 2000; Pearson 1999; Taxman 2002), or have focused on literature from only one country (e.g., Germany or the USA) (Chanhatasilpa 2000; Egg 2000). These reviews help to fulfil some of the gaps highlighted by the literature, but do not attempt to compare different interventions in different treatment settings.

Outcome measures in the systematic reviews focus on either recidivism in correctional or community settings (Chanhatasilpa 2000; Egg 2000; Pearson 1999) or specific drug and property related criminal behaviour for methadone maintenance treatment (Marsch 1998). A recent systematic review commissioned by the Home Office for England and Wales focused on the effectiveness of criminal justice and treatment programmes in reducing drug related crime, but did not specifically focus on offenders (Holloway 2005). Additionally, none of the above reviews consider the im-

part of the intervention on both criminal activity and drug misuse in a number of different settings or interventions.

The current review will fulfil this gap, focusing on the international literature, it will provide a unique comprehensive overview of the research literature relating to the effectiveness of interventions for drug-misusing offenders. In order to address this broad topic a series of questions will consider the effectiveness of different interventions in different settings (e.g. the courts, secure establishments and the community), in relation to both criminal activity and drug misuse. The review will additionally report descriptively on the costs of such treatment programs. The cost and cost-effectiveness data has not been presented in previous systematic reviews in this area (e.g. [Holloway 2005](#)).

OBJECTIVES

To assess the effectiveness of interventions for drug-misusing offenders in reducing criminal activity and drug misuse across a range of criminal justice settings. The review addressed the following questions:

Court-based

- (1) Do court-based interventions for drug-misusing offenders reduce criminal activity?
- (2) Do court-based interventions for drug-misusing offenders reduce drug use?

Secure establishment-based

- (1) Do secure establishment-based interventions for drug-misusing offenders reduce criminal activity?
- (2) Do secure establishment-based interventions for drug-misusing offenders reduce drug use?

Community-based

- (1) Do community-based interventions for drug-misusing offenders reduce criminal activity?
- (2) Do community-based interventions for drug-misusing offenders reduce drug use?

The review additionally considered the effectiveness of different types of interventions in relation to drug use and re-offending behaviour.

METHODS

Criteria for considering studies for this review

Types of studies

The current review forms part of a larger Department of Health for England and Wales-funded project ([Perry submitted](#) submitted), which also includes studies that have a comparison group, but are not randomly assigned (i.e., experimental studies without randomisation and controlled observational studies). For the purposes of this review however, only randomised controlled trials (RCTs) are reported.

Types of participants

Drug-misusing offenders were included in the review regardless of gender, age, ethnicity, or psychiatric illness. Offenders were defined as individuals who have been referred by the criminal justice system at baseline to the study. Offenders were either in police custody, being processed by the courts system, residing in secure establishments (e.g., special hospitals, prisons), or based in the community (i.e., under the care of the probation service).

Types of interventions

The review included any evaluated intervention; a component of which is designed to reduce, eliminate or prevent relapse to drug use. Types of interventions were further classified into the categories presented below and analysed separately. The comparison group of drug-misusing offenders was not restricted to a no treatment control; studies that contained comparisons with another intervention or a minimal treatment group (i.e. any reduced component of the intervention, such as therapeutic community with intensive aftercare compared to therapeutic community without intensive aftercare) were included and were similarly classified as for the experimental interventions.

Experimental interventions:

- (1) Pharmacological (e.g., methadone, naltrexone)
- (2) Sentencing options (e.g., drug court, mental health court, diversion)
- (3) Monitoring (e.g., drug testing, surveillance, intensive supervision)
- (4) Punitive (e.g., sanctions)
- (5) Aftercare
- (6) Case management
- (7) Shock incarceration/boot camp
- (8) Therapeutic communities
- (9) Counselling
- (10) Work release/vocational
- (11) Cognitive skills (e.g., 12-step, relapse prevention, multi-systemic therapy)
- (12) Substance abuse education

Comparison interventions:

- (1) Treatment as usual
- (2) Minimal treatment
- (3) Waiting-list control

(4) No treatment

Types of outcome measures

Primary outcomes:

(1) Drug use as measured by:

- Self-report drug use (unspecified drug, not including alcohol)
- Self-report drug use (specific drug)
- Addiction Severity Index (ASI drug use)
- Drug testing by urine analysis
- Drug testing by hair analysis
- Saliva analysis
- Any other additional tools (e.g., MAP or CISS)

(2) Criminal activity as measured by:

- Arrest for any offence (self-report/official records)
- Arrest for a drug offence (self-report/official records)
- Arrest for a technical violation (self-report/official records)
- Conviction for any offence (self-report/official records)
- Conviction for a drug offence (self-report/official records)
- Incarceration for any offence (self-report/official records)
- Incarceration for a drug offence (self-report/official records)
- Recidivism (self-report/official records)
- Criminal activity (self-report/official records)

Secondary outcomes:

(3) Health status (e.g., mentally disordered offenders)

(4) Information on concurrent psychiatric illness were recorded. Where appropriate, these groups of offenders were considered separately within a meta-analysis.

(5) Cost and cost effectiveness

Resource and cost information were recorded from the papers where available. A descriptive narrative was used to describe these findings. Where a paper reported on the cost-effectiveness, a full critical appraisal based on the [Drummond 1997](#), checklist was undertaken for those studies with sufficient information presented.

Search methods for identification of studies

1. Electronic searches:

We searched

- (1) MEDLINE (1966-October 2004)
- (2) EMBASE (1980-October 2004)
- (3) PsycINFO (1978-January 2004)
- (4) Pascal (1973-November 2004)
- (5) SciSearch (Science Citation Index) (1974-November 2004)
- (6) Social SciSearch (Social Science Citation Index) (1972-November 2004)
- (7) ASSIA (1987-November 2004)
- (8) Wilson Applied Science and Technology Abstracts (1983-October 2004)
- (9) Inside Conferences (1993-November 2004)

(10) Dissertation Abstracts (1961-October 2004)

(11) NTIS (1964-November 2004)

(12) Sociological Abstracts (1963-September 2004)

(13) HMIC (To September 2004)

(14) PAIS (1972-October 2004)

SIGLE (1980-June 2004)

(15) Criminal Justice Abstracts (1968-December 2003)

(16) National Research Register (March 2004)

(17) Current Controlled Trials (January 2004)

(18) Drugscope (February 2004)

(19) SPECTR (March 2004)

The search strategy was restricted to studies that were published or unpublished from 1980 onwards. By using this date the review encompasses a large body of research, allowing comparisons to be drawn concerning trends in quality assessment across time. A scoping review indicated that research prior to 1980 would have little relevance on current treatment options.

Search strategies were developed for each database in order to exploit the search engine most effectively and to make use of any controlled vocabulary. The search strategies were not designed to restrict the results to RCTs as the current review forms part of a larger Department of Health-funded project, which also includes studies that have a comparison group, but are not randomly assigned (i.e., experimental studies without randomisation and controlled observational studies). All searches included any language. See 'Additional [Table 1](#); [Table 2](#); [Table 3](#); [Table 4](#); [Table 5](#); [Table 6](#); [Table 7](#); [Table 8](#); [Table 9](#); [Table 10](#); [Table 11](#); [Table 12](#); [Table 13](#)' for each search strategy.

A range of relevant Internet sites including those of the Home office, National Institute of Drug Abuse (NIDA) and European association of libraries and information services on alcohol and other drugs (ELISAD). Directory web sites, including OMNI (<http://www.omni.ac.uk>) were searched for further relevant web sites.

2. Reference Checking

Attempts to identify further studies were made by examining the reference lists of all retrieved articles. Searches of the catalogues of relevant organisations and research funders were also undertaken.

3. Personnel communication

Experts were contacted and asked of their knowledge of other studies, published or unpublished, relevant to the review article.

Data collection and analysis

Study Selection

Two independent authors inspected the search hits by reading the titles and abstracts. Each potentially relevant study located in the search was obtained as a full article and independently assessed for inclusion by two authors. In the case of discordance, a third independent author arbitrated. Where it was not possible to evaluate the study because of language problems or missing information the studies were classified as 'translation/information required to determine decision' until a translation or further details was pro-

vided. The pre-screening criteria are divided into eight key questions.

Pre-screening criteria

- (1) Is the document written in 1980 or later? [If “no,” exclude document]
- (2) Is the document an empirical study? [If “no” exclude document]
- (3) Does the study evaluate an intervention, a component of which is designed to reduce, eliminate, or prevent relapse with drug-using offenders?

(E.g. drug-using is implied if the program is targeted at reducing drug use in a group of individuals, and/or can be ascertained from the background characteristics of the group)

(E.g., offenders residing in special hospitals, prisons, the community (i.e., under the care of the probation service) or offenders who are diverted from court or placed on arrest referral schemes for treatment).

[If “no” exclude document]

Note: the entire sample need not be drug-using.

- (4) Are the participants referred by the criminal justice system at baseline?

Note: the entire sample needs to be offenders.

[If “no” exclude document]

- (5) Does the study report pre and post-program measures of drug use?

Note: pre and post measures must be the same before and after, e.g. use vs. abstinence. Where measures are not the same, these papers should be excluded.

[If “no” to question 5 & 6 then exclude document]

OR (Note: studies do not need to include both drug and crime outcomes.)

- (6) Does the study report pre and post-program measures of criminal behaviour?

Note: pre and post measures must be the same, but setting (e.g., prison) could be used to infer incarceration (pre) vs. re-incarceration (post). Where measures are not the same, these papers should be excluded.

[If “no” to both 5 & 6 then exclude document]

- (7) Does the study include a comparison group?

(E.g. this could include a control or minimal treatment group or another intervention group.)

[If “no” exclude document]

- (8) Do the outcome measures refer to the same length of follow-up for two groups?

(E.g. a paper would be excluded that reported outcome measures for the intervention at one month and the control group at six months.)

[If “no” exclude document]

Assessment of methodological quality

Two independent reviewers assessed each study for methodological quality using the Centre for Reviews and Dissemination Guidelines (CRD 2001), using ratings of ‘adequate’, ‘partial’, ‘reported’, ‘inadequate’ and ‘unknown’. Allocation concealment was also assessed using the Cochrane ratings of A, B, C and D (Higgins 2005). The quality evaluation was not used as a criterion for exclusion and inclusion, but the limits were described and are discussed in the relevant sections of the review. The quality assessment considered the following items:

Assessment of baseline characteristics.

This question will assess whether the groups were similar at baseline with respect to criminal and drug history characteristics.

We used the following classifications:

(A) Yes: reviewer consults list of baseline characteristics, author comments and any statistical tests and decides that the characteristics are similar.

(B) No: reviewer consults list of baseline characteristics, author comments and any statistical tests and decides that the characteristics are not similar.

(C) Unknown: insufficient information is provided to assess the similarity of baseline characteristics.

Blinding methodology.

This question will assess whether the outcome assessors were adequately blinded to treatment allocation.

We used the following classifications:

(A) Adequate: independent person or panel or (self) assessments in watertight blind conditions.

(B) Inadequate: clinician is assessor in trial on drugs with clear side effects or a different influence on outcomes.

(C) Unknown: no statements on procedures and not deducible.

Loss to follow-up .

This question will assess whether loss to follow-up was adequately reported.

We used the following classifications:

(A) Adequate: number randomised must be stated. Number(s) lost to follow-up (dropped out) stated or deducible (from tables) for each group and reasons summarised for each group.

(B) Partial: numbers, but not the reasons (or vice versa).

(C) Inadequate: numbers randomised not stated or not specified for each group.

(D) Unknown: no details provided in text.

Allocation concealment

We used the following classifications:

(A) Low risk of bias: adequate allocation concealment, i.e. central randomisation (e.g. allocation by a central office unaware of subject characteristics), pre-numbered or coded identical bottles or containers which are administered serially to participants, drug prepared by the pharmacy, serially numbered, opaque, sealed envelopes, on-site computer system combined with allocations kept in a locked unreadable; computer file that can be accessed only after the characteristics of an enrolled participant have been entered or other description that contained elements convincing of

concealment.

(B) Moderate risk of bias: unclear allocation concealment, in which the authors either did not report an allocation concealment approach at all or report an approach that did not fall in the category A or C.

(C) High risk of bias: inadequate allocation concealment, such as alternation or reference to case numbers, dates of birth, day of the week. Any procedure that is entirely transparent before allocation, such as an open list of random numbers or other description that contained elements convincing of not concealment.

(D) No allocation concealment used: when reviewers have not used this method of rating study quality, i.e. for studies which are not randomised or quasi randomised.

Data extraction

The first author extracted data by and confirmed by the second reviewer. Data extraction tables were used to present a narrative description of the papers included in the review. Those papers excluded from the second stage of pre-screening are presented in exclusion tables, alongside the reasons for exclusion. Papers are presented according to setting and further divided into broad themes of populations, intervention and outcome measures. This helped to categorise similar studies together.

Data synthesis

A series of meta-analyses and a narrative review were performed where appropriate to address each of the key questions outlined in the objectives for each of the settings, intervention categories and nominated outcomes. The narrative tables included a presentation of the study details (e.g., author, year of publication, and country of study origin), study methods (e.g., random assignment), participants (e.g., number in sample, age, gender, ethnicity, age, mental health status) interventions (e.g., description, duration, intensity and setting), outcomes (e.g., description, follow-up period and reporting mechanism), resource and cost information and resource savings (e.g., number of staff, intervention delivery, estimated costs and estimated savings) and notes (e.g., methodological and quality assessment information).

Statistical analysis

The Revman software package was used to perform a series of meta-analyses for continuous and dichotomous outcome measures. Where appropriate, sensitivity analyses were conducted. Tests for homogeneity were conducted to assess the appropriateness of the meta-analysis. Statistical advice was provided by a statistician at the University of York. Where appropriate presentation of this information was generated via forest plots, and Odds Ratios (ORs).

RESULTS

Description of studies

See: [Characteristics of included studies](#); [Characteristics of excluded studies](#).

The search strategies revealed a total of 8,217 titles and abstracts of potential relevance. Screening reduced this to 90 studies eligible for further evaluation. The 90 studies resulted in 36 randomised controlled trials (RCTs). Of these 36 trials, 12 were excluded from the review, leaving a total of 24 RCTs.

Excluded studies

The 12 excluded trials had three main reasons for exclusion. Firstly, the lack of an appropriate comparison group (Stevens 1998S). Secondly, the outcome measures were not appropriately measured at pre- and post-test (Anglin 1999; Dembo 2000; Dugan 1998; Grohman 2002; Harrell 2001; Henggeler 1991; Henggeler 2002; Messina 2000; Nemes 1998; Nemes 1999). Thirdly, studies were excluded where follow-up periods were not equivalent (Dembo 2000; Di Nitto 2002).

Included studies

The included studies display data from 19 publications describing 24 RCTs. Of these 24 RCTs, seven were conducted in a court setting, these were divided into monitoring interventions (4 studies) and sentencing interventions (3 studies). 4 were conducted in a secure establishment setting, these included interventions focusing on therapeutic communities (3 studies) and pharmacological interventions (1 study). The remaining 13 were conducted in the community. These were divided into monitoring interventions (9 studies), pharmacological interventions (1 study), aftercare (1 study) and cognitive skills training (2 studies).

Court setting: Monitoring interventions

Four of the seven court-based studies focused on monitoring interventions. All of these studies originated from one publication, which used four separate samples to assess the effectiveness of community-based pre-trial release with drug testing and sanctions in comparison to routine pre-trial release (Britt 1992 a; Britt 1992 b; Britt 1992 c; Britt 1992 d). Across these studies, drug-misusing offenders were randomly assigned to an active monitoring intervention or treatment as usual. The duration of the intervention was not reported. The sample size across the 4 studies totaled 2,007 although it is not possible to determine the number assigned in studies 3 and 4 (Britt 1992 c; Britt 1992 d). Details about the participants' gender, psychiatric diagnosis and drug and or alcohol use were not reported. All four studies measured arrest, using data from official records at three-month and seven to nine-month follow-up periods.

Court setting: Sentencing interventions

The three remaining court-based studies examined sentencing interventions. Two studies assessed the effectiveness of drug courts compared to routine probation and/or parole; the later of these studies examined the same sample of participants across multiple follow-up periods (Deschenes 1994; Gottfredson 2002). The other study assessed the effectiveness of a mental health drug court with ACT (assertive community treatment) case management in

comparison to treatment as usual (Cosden 2003). Across these studies, drug-misusing offenders were randomly assigned to an active sentencing intervention, treatment as usual or routine parole or probation. The duration of the interventions varied from 6 to 24 months. The sample size across the four studies varied from 235 to 639 participants. Over half of all participants in all of the studies were male, and in one study all participants were mentally disordered (Cosden 2003). Drug use at baseline was reported in all participants in two of the studies (Deschenes 1994; Gottfredson 2002). Only one study measured drug use (Cosden 2003), using self-report data from the Addiction Severity Index (ASI) at 12-month follow-up. Using data from official records the other two studies reported on arrest, drug arrest, drug charge and conviction at between 6 and 24 months (Deschenes 1994; Gottfredson 2002).

Secure establishment: Therapeutic community interventions

Five publications evaluating three RCTs were found to examine secure establishment-based therapeutic community interventions. Three publications produced one study using the same sample of participants across multiple follow-up periods assessing the effectiveness of a prison-based AMITY therapeutic community followed by community-based residential aftercare, which was compared to a waiting list control (Wexler 1999). Of the remaining two studies, one study assessed the effectiveness of a CREST work release transitional therapeutic community in comparison to routine work release (Nielsen 1996). The full data set is reported here although it was found that the effects of treatment are no longer observed when considering the female participants only. The final study assessed the effectiveness of a Personal Reflections therapeutic community followed by community-based aftercare, which was compared to a prison-based mental health program (Sacks 2004). Across these studies, drug-misusing offenders were randomly assigned to an intervention of a therapeutic community (sometimes followed by aftercare) or to a waiting list control; a prison-based mental health program or routine work release. The duration of the interventions ranged from 6 to 24 months. The sample size across the three studies ranged from 236 to 715. Two studies contained only male participants, whereas the Nielsen 1996 study contained both male and female participants. Two studies contained solely mentally disordered participants (Sacks 2004; Wexler 1999). Drug use history was reported in the Nielsen 1996 and Wexler 1999 studies, and both drug and alcohol use was reported in the Sacks 2004 study. The three studies measured drug use, recidivism criminal activity and incarceration. Drug use was reported using self-report data between 6 and 18-month follow-up periods. Recidivism, criminal activity and incarceration reported using data from official records between 6 and 60 months.

Secure establishment: Pharmacological interventions

One study assessed the effectiveness of a pharmacological intervention, randomly assigning drug-using offenders to prison-based methadone maintenance treatment or a waiting list control (Dolan 2003). The average duration of the intervention was 144 days

(range 72-530). The sample size of participants was 382; all were male with no psychiatric history being reported. All participants had a drug use history. The study measured drug use using data from hair analysis at two, three and four-month follow-ups. Only participants that had been in continuous custody between assignment and follow-up were included.

Community: Monitoring interventions

Monitoring interventions were evaluated in eight studies, seven of which were extracted from one publication, using separate samples to assess the effectiveness of intensive supervision and surveillance in comparison to routine parole (Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia 1992 d) and to assess the effectiveness of intensive supervision and surveillance in comparison to intensive supervision alone (Petersilia 1992 e; Petersilia 1992 f; Petersilia 1992 g). The remaining study evaluated the effectiveness of parole with varying frequencies of drug testing in comparison to routine parole (Haapanen 2002). Across these studies, drug-using offenders were randomly assigned to different monitoring conditions. The duration of the intervention ranged between 6 and 24 months. The sample size across the studies ranged from 50 to 1958. Across all samples participants included both male and female offenders, with no history of psychiatric disorder reported. The majority of participants had a drug offending history, but the drug testing evaluation also contained offenders who were not drug-using (Haapanen 2002). Alcohol use was not reported. The seven Petersilia studies (Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia 1992 d; Petersilia 1992 e; Petersilia 1992 f; Petersilia 1992 g) measured recidivism, arrest, drug arrest, conviction and incarceration using data from official records at one-year follow-up. The Haapanen 2002 study reported arrest at 24 and 42-month follow-up periods.

Community: Pharmacological interventions

One study assessed the effectiveness of a naltrexone program and routine parole in comparison to routine parole (Cornish 1997), randomly assigning drug-using offenders to a pharmacological intervention or no treatment. The duration of the intervention was six months. The sample size was 51 and included both male and female participants, with no psychiatric history reported. All participants had a drug history, but alcohol use was not reported. The study measured incarceration using official data from at six months.

Community: Aftercare interventions

One study assessed an aftercare intervention by randomly assigning drug-using offenders to a community-based opportunity to succeed aftercare program or to routine parole or probation (Rossman 1999). The duration of the intervention was between one and two years. The sample contained 398 participants, comprised of both male and female offenders, with psychiatric diagnosis, drug and alcohol use not reported. The study measured any marijuana use, intense marijuana use, any hard drug use, intense hard drug use and drug dealing, using self-report data at between

3-month and 12-month follow-up periods.

Community: Case management interventions

One study assessed the effectiveness of a community-based case management intervention. In this study, drug-using offenders were randomly assigned to ACT (assertive community treatment) case management or to routine parole (Martin 1993). The duration of the intervention was six months. The sample size was 188 and included only the subset of participants for which the necessary follow-up period had elapsed. Both male and female offenders were included; psychiatric diagnosis and alcohol history were not reported. Drug history and offending history was apparent in all participants. The study measured incarceration, using data from official records at six-month follow-up and drug use, using data from self-report at six-month follow up.

Community: Cognitive skills training interventions

Two studies examined cognitive skills training. The effectiveness of multi-systemic therapy delivered in the home and community was compared to community services as usual (Henggeler 1999; Schoenwald 1996) and a social support program was compared to drug testing and routine parole, and also to routine parole (Hanlon 1999). The duration of the interventions ranged from 5 months to 12 months. The sample size across the two studies ranged from 118 to 536; both studies included male and female offenders. The Henggeler 1999 study focused on juvenile offenders only; the majority of these participants also had a psychiatric diagnosis. Drug use was reported in the Hanlon et al. (1999) study, and both drug and alcohol history were reported in the Henggeler 1999 study. The Henggeler 1999 study measured drug use and delinquency, using data from self-report at post treatment and six months follow-up. The Hanlon 1999 study reported arrest and incarceration, using data from official records at one-year follow-up.

Risk of bias in included studies

Randomization: All the studies were described as randomised, but only 4 of the 24 RCT studies reported adequate methods of randomisation (Cosden 2003; Deschenes 1994; Dolan 2003; Haapanen 2002). The most common reason for the studies not being rated as adequate was either unclear reporting of the randomisation methodology or unacceptable methods of randomisation such as alternation. In some studies the randomisation methodology may have been acceptable, but the authors did not describe the methodology. Consequently, such studies received a poor rating by the reviewers.

Characteristics at baseline: Of the 24 studies, 7 reported that participants' drug history was similar across the groups at baseline (Deschenes 1994; Dolan 2003; Haapanen 2002; Petersilia 1992 a; Petersilia 1992 c; Petersilia 1992 g; Wexler 1999). A greater number of the studies (n=18) reported similar criminal history characteristics at baseline (Britt 1992 a; Britt 1992 b; Britt 1992 c; Britt 1992 d; Cosden 2003; Deschenes 1994; Dolan 2003;

Gottfredson 2002; Haapanen 2002; Henggeler 1999; Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia 1992 e; Petersilia 1992 f; Petersilia 1992 g; Sacks 2004; Wexler 1999)

Allocation concealment: Across the 24 studies only 4 were allocated an A for adequate allocation concealment (Cosden 2003; Deschenes 1994; Dolan 2003; Haapanen 2002). The majority of the studies (n=14) were categorised as moderate risk of bias and were rated as B (Cornish 1997; Gottfredson 2002; Henggeler 1999; Martin 1993; Nielsen 1996; Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia 1992 d; Petersilia 1992 e; Petersilia 1992 f; Petersilia 1992 g; Sacks 2004; Wexler 1999). The description of the random allocation concealment for the five remaining studies was unclear, representing a high risk of bias and rated as C (Britt 1992 a; Britt 1992 b; Britt 1992 c; Britt 1992 d; Hanlon 1999).

Follow-up: Only seven studies reported loss to follow-up with the reasons adequately described (Deschenes 1994; Dolan 2003; Haapanen 2002; Henggeler 1999; Rossman 1999; Rossman 1999; Wexler 1999).

Effects of interventions

Of the 24 RCT studies 15 were included in a series of meta-analyses. Tests for heterogeneity at the 0.01 level revealed that across all of the meta-analyses the studies were found to be homogeneous. Odds Ratios (OR) were used to investigate the results of combining dichotomous outcome measures. A random effects model was used to account for the fact that the participants did not come from a single underlying population.

• COURT-BASED INTERVENTIONS

Monitoring interventions

Four studies were found to evaluate court-based monitoring interventions. All four studies originated from one publication, which used four separate samples to assess the effectiveness of pre-trial release with drug testing and sanctions in comparison to routine pre-trial release (Britt 1992 a; Britt 1992 b; Britt 1992 c; Britt 1992 d).

(1) Drug use

The studies did not report on drug use.

(2) Criminal activity

All four studies measured arrest, using data from official records at three and seven to nine-month follow-up periods. A meta-analysis combining studies 3 and 4 (Britt 1992 c; Britt 1992 d) showed a significant OR for arrest at 90 days favouring the comparison group OR 1.33 (95% CI, 1.04 to 1.70), see comparison 01, outcome 01.

Sentencing interventions

Three studies were found to evaluate court-based sentencing interventions. Two studies assessed the effectiveness of drug courts compared to routine probation and/or parole; the later of these

studies examined the same sample of participants across multiple follow-up periods (Deschenes 1994; Gottfredson 2002). The other study assessed the effectiveness of a sentencing intervention (mental health drug court) combined with ACT (assertive community treatment) case management, in comparison to treatment as usual (Cosden 2003). None of these studies were homogenous enough to combine in a meta-analysis and the results from each singular study are presented below.

(1) Drug use

One study measured drug use (Cosden 2003), using self-report data from the Addiction Severity Index (ASI) at 12-month follow-up to evaluate a mental health drug court combined with ACT case management. The OR was not found to be statistically significant OR 0.00 (95% CI -0.03 to 0.03).

(2) Criminal activity

Deschenes 1994 reported arrest for any offence at 6-month follow-up OR 1.12 (95% CI, 0.70 to 1.79) and 12-month follow-up OR 0.94 (95% CI, 0.65 to 1.37) using data from official records, and arrest for a drug offence at 12-month follow-up OR 1.02 (95% CI, 0.65 to 1.61) using data from official records. None of these results were statistically significant.

Using data from official records Gottfredson 2002G reported on arrest, conviction and drug charge at 12 and 24-month follow-up. A significant OR was found favouring the Baltimore drug court programme when arrest was used as an outcome measure at both 12 months OR 0.53 (95% CI, 0.31 to 0.91) and 24 months OR 0.45 (95% CI, 0.24 to 0.84).

At 12 months there was no significant effect regarding criminal activity as measured by drug charge OR 0.65 (95% CI, 0.37 to 1.13), however there was at 24 months OR 0.57 (95% CI, 0.34 to 0.97). The ORs were not found to be significant when conviction was used at either 12 months OR 0.82 (95% CI 0.47 to 1.42) or 24 months OR 0.85 (95% CI, 0.50, 1.42).

• SECURE ESTABLISHMENT-BASED INTERVENTIONS

Therapeutic community interventions

Five publications evaluating three RCTs were found to examine secure establishment-based therapeutic community interventions. Three publications produced one study using the same sample of participants across multiple follow-up periods assessing the effectiveness of a prison-based AMITY therapeutic community followed by community-based residential aftercare, which was compared to a no-treatment control (Wexler 1999). Of the remaining two studies, one study assessed the effectiveness of a CREST work release transitional therapeutic community in comparison to routine work release (Nielsen 1996). The full data set is reported here although it was found that the effects of treatment are no longer observed when considering the female participants only. The final study assessed the effectiveness of a Personal Reflections therapeutic community followed by community-based aftercare, which was compared to a prison-based mental health program (Sacks 2004).

(1) Drug use

In evaluating the CREST work release therapeutic community Nielsen 1996 reported drug use as measured by self-report at 6-month OR 0.12 (95% CI 0.08, 0.18) and 18-month follow-up OR 0.28 (95% CI 0.17 to 0.47). The ORs were both found to be statistically significant favouring the CREST work release therapeutic community over routine work release.

(2) Criminal activity

All of the studies showed significant ORs with the criminal activity outcome measures favouring the intervention groups. Nielsen et al. (1996) reported criminal activity as measured by recidivism for any offence, which referred to an offender being arrested and charged. These outcomes were collected through self-report and referred to 6-month OR 0.32 (95% CI 0.20 to 0.50) and 18-month follow-up periods OR 0.36 (95% CI 0.23 to 0.58).

One meta-analysis was possible combining the Sacks 2004 and Wexler 1999 studies focusing on the effectiveness of a therapeutic community and aftercare in comparison to a mental health programme and waiting list control. Incarceration at 12 months OR 0.37, (95%CI, 0.16 to 0.87), see comparison 02, outcome 01 and following sensitivity analyses OR 0.66 (95% CI, 0.38 to 1.15), are showed in comparison 02, outcome 02.

Pharmacological interventions

One study assessed the effectiveness of a pharmacological intervention, randomly assigning drug-using offenders to prison-based methadone maintenance treatment or a waiting list control (Dolan 2003).

(1) Drug use

Dolan 2003 reported drug use as measured by drug testing (hair analysis; official records) at 2 months OR 0.67 (95% CI 0.36 to 1.25), 3 months OR 0.46 (95% CI 0.25 to 0.82) and 4 months OR 0.66 (95% CI 0.37 to 1.21) follow-up. The OR was found to be significant at three months only, favouring the intervention group.

(2) Criminal activity

Criminal activity was not reported on.

• COMMUNITY-BASED INTERVENTIONS

Monitoring interventions

Monitoring interventions were evaluated in eight studies, seven of which were extracted from one publication, using separate samples to assess the effectiveness of intensive supervision and surveillance in comparison to routine parole (Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia 1992 d) and to assess the effectiveness of intensive supervision and surveillance in comparison to intensive supervision alone (Petersilia 1992 e; Petersilia 1992 f; Petersilia 1992 g). The remaining study evaluated the effectiveness of parole with varying frequencies of drug testing in comparison to routine parole (Haapanen 2002).

(1) Drug use

Drug use was not reported on.

(2) Criminal activity

Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia

1992 d were combined in a series of meta-analyses focusing on the effectiveness of intensive supervision vs routine parole/probation. A series of different outcome measures were used:

- Recidivism at one year OR 1.98 (95% CI 1.01 to 3.87) *see* comparison 03, outcome 01
- Arrest at one year OR 1.49 (95% CI 0.88 to 2.51) *see* comparison 03, outcome 02,
- Drug arrest at one year OR 1.10 (95% CI 0.50, to 2.39) *see* comparison 03, outcome 03,
- Conviction at one year OR 0.93 (95% CI 0.55 to 1.58) *see* comparison 03, outcome 04,
- Incarceration at one year OR 0.88 (95% CI 0.50 to 1.54) *see* comparison 03, outcome 05,

Petersilia 1992 e; Petersilia 1992 f; Petersilia 1992 g were combined a series of meta-analyses focusing on the effectiveness of intensive supervision and increased surveillance vs. intensive supervision. A series of different outcome measures were used:

- Recidivism at one year OR 2.09 (95% CI 0.86 to 5.07) *see* comparison 04, outcome 01
- Arrest at one year OR 1.22 (95% CI 0.51 to 2.88) *see* comparison 04, outcome 02
- Drug arrest at one year OR 1.29 (95% CI 0.35 to 4.85) *see* comparison 04, outcome 03
- Conviction at one year OR 1.14 (95% CI 0.22 to 5.91) *see* comparison 04, outcome 04
- Incarceration at one year OR 1.30 (95% CI 0.39, to 4.30) *see* comparison 04, outcome 05

The Haapanen 2002 study reported arrest at 24 and 42-month follow-up periods. Comparing the four groups receiving drug testing to the routine parole group revealed no significant effect sizes at 24 months OR 0.93 (95% CI 0.71 to 1.22), OR 1.05 (95% CI 0.79 to 1.38), OR 1.16 (95% CI 0.88 to 1.52), OR 1.11 (95% CI 0.77 to 1.59), OR 1.02 (95% CI 0.75 to 1.38)), OR 1.06 (95% CI 0.78 to 1.45) and OR 1.24 (95% CI 0.8 to 1.89)). At 42 months the only significant OR was found to favour the routine parole group OR=1.46 (95% CI 1.05 to 2.02).

Pharmacological interventions

One study assessed the effectiveness of a naltrexone program and routine parole in comparison to routine parole (Cornish 1997), randomly assigning drug-using offenders to a pharmacological intervention or no treatment.

(1) Drug use

Drug use was not reported

(2) Criminal activity

The Cornish 1997 study reported on incarceration using official data from at six months. A significant OR 0.25 (95% CI 0.07 to 0.86) was found for incarceration, favouring the intervention group.

Aftercare interventions

One study assessed an aftercare intervention by randomly assigning drug-using offenders to a community-based opportunity

to succeed aftercare program or to routine parole or probation (Rossman 1999).

(1) Drug use

The Rossman 1999 study measured any marijuana use, intense marijuana use, any hard drug use, intense hard drug use and drug dealing, using self-report data at between 3-month and 12-month follow-up periods. The results were inconclusive with a significant ORS found favouring the intervention group using intense marijuana use as the outcome, OR 0.49 (95% CI 0.25 to 0.96)), yet favouring the comparison group when drug dealing was used as the outcome OR 2.31 (95% CI 1.40 to 3.79)

(2) Criminal activity

Criminal activity was not reported on.

Case management interventions

One study assessed the effectiveness of a community-based case management intervention. In this study, drug-using offenders were randomly assigned to ACT (assertive community treatment) case management or to routine parole (Martin 1993).

(1) Drug use

The Martin and Scarpitti (1993) study self-report drug use at six-months follow-up did not show any significant OR (OR= 1.44[95% CI=0.66,3.12]).

(2) Criminal activity

Measuring incarceration at six-months follow-up the Martin and Scarpitti (1993) study showed no significant OR (OR= 0.84[95% CI 0.41,1.73]).

Cognitive skills training interventions

Two studies examined cognitive skills training. The effectiveness of multi-systemic therapy delivered in the home and community was compared to community services as usual (Henggeler 1999) and a social support program was compared to drug testing and routine parole, and also to routine parole (Hanlon 1999).

(1) Drug use

The Henggeler 1999 study measured drug use using self-report data at post treatment OR 1.28 (95% CI 0.54 to 3.05), and at six months OR 1.35 (95% CI 0.56 to 3.23), neither were found to be statistically significant.

(2) Criminal activity

The Henggeler 1999 study measured delinquency using self-report data at post treatment OR 1.00 (95% CI 12.77 to 14.77), and at six months OR 2.00 (95% CI 11.96 to 15.96)), neither were found to be statistically significant.

The Hanlon 1999 study reported arrest using official records at one year I vs I1 OR 0.66 (95% CI 0.41 to 1.05)), I vs. C OR 0.74 (95% CI 0.48 to 1.13), and I1 vs. C OR 1.13 (95% CI 0.67 to 1.91), and incarceration at one year I vs. I1 OR 0.90 (95% CI 0.54 to 1.51), I vs. C OR 0.74 (95% CI 0.47 to 1.16) and I1 vs. C OR 0.82 (95% CI 0.46 to 1.44), none of the results were found to be statistically significant.

Cost and cost effectiveness

No explicit cost data was available for the court-based interventions. One study contained some information about the cost of

providing a therapeutic community intervention (Sacks 2004). For this intervention the additional marginal costs on top of the specific incarceration costs were USD \$7.37 per day. Cost information was reported in seven of the community studies (Henggeler 1999; Petersilia 1992 a; Petersilia 1992 b; Petersilia 1992 c; Petersilia 1992 d; Rossman 1999). Petesillia suggests that there is an additional cost of USD \$3000 per annum (1992 prices) for intensive probation supervision. On cost comparison, the costs per day are lower or comparable to the additional costs per day of the therapeutic community in prison. Without any allowance for administration costs, Rossman et al. (1999) suggests that the service provision cost for the opportunity to succeed scheme is about USD \$1810 for the one to two year programme. This study does provide an estimate of the benefits of the programme in financial terms, and were found to be similar (USD \$105,339) to the service provision costs (USD \$108,632). These figures were based on cost per programme.

One study provided enough data for a detailed critique of cost effectiveness using the Drummond Scale. Schoenwald 1996 is an economic paper linked to the Henggeler 1999 evaluation of the community-based multi-systemic therapy. The paper compared services accessed by young offenders to the costs of specific programme costs. Individual outcomes for the programme were included in the economic analysis and the results of an additional USD \$877 cost per young person for the therapy was estimated.

DISCUSSION

This systematic review provides evidence from 24 RCTs, 15 of these were included in a series of sub-set meta analyses. Little conclusive evidence can be drawn from the studies conducted in the courts or community settings. The inference of these interventions is weakened by the limited methodological quality of some of the RCTs, including loss to follow-up and potential baseline differences between the groups. Therapeutic community interventions, followed by aftercare, may be promising for drug-using offenders. This work is also supported by quasi-experimental designs (e.g., Inciardi 1997), but such studies are susceptible to a greater amount of bias.

The outcome measures used in the current studies are broad ranging and reflect the multidisciplinary nature of working across agencies with drug-using offenders. The appropriate use of such measures is important when trying to assess the effectiveness of such treatment programmes. Other outcome measures that might reflect success in treatment could perhaps include, employment.

Cost information within the studies is sparse, with only one study providing the opportunity for a full economic evaluation (Schoenwald 1996). This lack of information allows for little comparison of cost effectiveness between different types of drug treatment programmes. Furthermore, very few studies include females,

juveniles and young offenders with the majority reporting on male adults. Development of studies focusing on these particularly vulnerable groups may help the development of specifically tailor made interventions for such participants. In line with such comments is the importance of selecting participants appropriately for specifically targeted programmes. For example, incorrect selection of participants for programmes could give misleading negative results.

AUTHORS' CONCLUSIONS

Implications for practice

Very limited conclusions can be drawn about the overall effectiveness of drug treatment programmes for offenders under the care of the criminal justice system. Promising results are highlight the use of therapeutic communities with aftercare facilities. The success of such programmes in secure settings maybe attributed to the large numbers of participants completing the programme. Maintenance and retention of such individuals in the courts or the community is very difficult due to the often chaotic lifestyle led by individuals attending such programmes. Such problems affect the continuity of treatment programmes. Standardisation of outcome measures for drug-using offenders should be used in a range of different interventions and settings.

Implications for research

There is some evidence to suggest that therapeutic communities with aftercare have some success in reducing drug use and criminal activity in drug-using offenders. There has however been little research evaluating and developing interventions with females, juveniles and young offenders. There is therefore perhaps a need to develop interventions that are tailor made to the needs of these subgroups of populations. Very limited information is provided on the costs and resources involved in the delivery of such interventions, particularly with regards to the UK literature. Attempts to address this gap could follow costing methodology developed in the USA (Yates, 1999). A broad range of outcome measures have been presented in this review reflecting the multidisciplinary nature of working with clients across a number of different agencies and criminal justice settings. Future work should consider the most appropriate use of outcomes and produce some standardisation from which comparison can be made across the literature. Additionally, it is important to stress the need to conduct high quality RCTs in drug misuse treatment in general. This will help policy makers to make informed choices about the relative effectiveness of treatment for specific groups of individuals.

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* Indicates the major publication for the study

CHARACTERISTICS OF STUDIES

Characteristics of included studies [ordered by study ID]

Britt 1992 a

Methods	Allocation: random assignment Randomisation method: inadequate Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: partial	
Participants	619 adults Age not reported Gender not reported Ethnicity not reported Drug use not reported Alcohol use not reported Psychiatric history not reported Eligibility criteria: released pre-trial defendants	
Interventions	Court-based monitoring intervention vs. treatment as usual. (I) pre-trial release & drugs testing & sanctions (n assigned not reported) vs. (C) routine pre-trial release (n assigned not reported). Intensity and duration not reported for either group	
Outcomes	Arrest for any offence (official records) during the last 7-9 months at 7-9 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	No	C - Inadequate

Britt 1992 b

Methods	Allocation: random assignment Randomisation method: inadequate Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: partial	
Participants	264 adults Age not reported Gender not reported Ethnicity not reported	

Britt 1992 b (Continued)

	Drug use not reported Alcohol use not reported Psychiatric history not reported Eligibility criteria: released pre-trial defendants	
Interventions	Court-based monitoring intervention vs. treatment as usual. (I) pre-trial release & drugs testing & sanctions (n assigned not reported) vs. (C) routine pre-trial release (n assigned not reported). Intensity and duration not reported for either group	
Outcomes	Arrest for any offence (official records) during the last 7-9 months at 7-9 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	No	C - Inadequate

Britt 1992 c

Methods	Arrest for any offence (official records) during the last 7-9 months at 7-9 months follow-up	
Participants	234 adults Age not reported Gender not reported Ethnicity not reported Drug use not reported Alcohol use not reported Psychiatric history not reported Eligibility criteria: released pre-trial defendants	
Interventions	Court-based monitoring intervention vs. treatment as usual. (I) pre-trial release & drugs testing & sanctions (n assigned not reported) vs. (C) routine pre-trial release (n assigned not reported). Intensity and duration not reported for either group	
Outcomes	Arrest for any offence (official records) during the last 3 months at 3 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	No	C - Inadequate

Britt 1992 d

Methods	Allocation: random assignment Randomisation method: inadequate Similar on drug use: no Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: inadequate	
Participants	890 adults Age not reported Gender not reported Ethnicity not reported Drug use not reported Alcohol use not reported Psychiatric history not reported Eligibility criteria: released pre-trial defendants	
Interventions	Court-based monitoring intervention vs. treatment as usual. (I) pre-trial release & drugs testing & sanctions (n assigned not reported) vs. (C) routine pre-trial release (n assigned not reported). Intensity and duration not reported for either group	
Outcomes	Arrest for any offence (official records) during the last 3 months at 3 months follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	No	C - Inadequate

Cornish 1997

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: unknown Blinding methodology: unknown Loss to follow-up: inadequate
Participants	51 adults
Interventions	Community-based naltrexone program & routine parole/probation vs. routine parole/probation
Outcomes	Incarceration for technical violation (official records) during the last 6 months at 6 months follow-up
Notes	

<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Cosden 2003

Methods	Allocation: random assignment Randomisation method: adequate Similar on drug use: unknown Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: partial	
Participants	235 adults Age not reported 50.2% male 70.6% European American Drug use not reported Alcohol use not reported 100% psychiatric history Eligibility criteria: adults charged with a felony or misdemeanour who were booked into county jail, had at least one prior booking and were diagnosed with a serious and pervasive mental illness and were residents of the county involved. Pre-plea participants were required to have no previous offenses involving violence; post-adjudication participants with prior violence were eligible if they were considered to no longer pose a threat	
Interventions	Court-based sentencing and case management intervention vs. treatment as usual. (I) mental health treatment court (MHTC) & assertive community treatment (ACT) case management (n=137) vs. (C) treatment as usual (n=98). The (I) group received weekly or bi-weekly court supervision and frequent contact with case managers, duration 18 months, followed by treatment as usual if required. The (C) group received traditional court proceedings and county mental health services as usual for at least 18 months which was less intensive than (I)	
Outcomes	Drug use (Addiction Severity Index, self-report) during the last 1 month at 12 months follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Deschenes 1994

Methods	Allocation: random assignment Randomisation method: adequate Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: adequate	
Participants	639 adults Mean age 29.8 (s.d. not reported) 77.9% male 54.0% white 100% drug-using Alcohol use not reported Psychiatric history not reported Eligibility criteria: offenders sentenced to probation for a felony drug offence of drug use or possession and those with similar needs for treatment. Offenders were ineligible if they required inpatient counselling, the community punishment program, specialized caseload supervision or a different type of probation	
Interventions	Court-based sentencing intervention vs. treatment as usual. (I) post adjudication drug court (n=177) vs. (C) routine probation with varying frequencies of urine testing (n=462). The (I) group received drug education classes, process groups, case management and aftercare. The intervention consisted of three phases of treatment that last 2 months each, followed by up to 9 months of aftercare. The first phase involved weekly classes, weekly process groups, weekly twelve-step meetings, weekly meetings with probation officers and random urine testing. The second phase involved weekly process groups, weekly twelve-step meetings, other terms of probation and random urine tests. The third phase involved weekly process groups and at least weekly twelve-step meetings. The aftercare involved weekly process groups. The drug court lasted between 6 and 12 months with monthly progress reports with rewards and sanctions. The (C) group received routine probation with varying frequencies of urine testing (none, random once per month, or scheduled for twice a week) and visits from the probation officer as determined by the risk/need assessment; duration not reported	
Outcomes	Arrest for any offence (official records) during the last 6 months at 6 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Dolan 2003

Methods	Allocation: random assignment Randomisation method: adequate Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: adequate Loss to follow-up: adequate
Participants	382 adults & young offenders Mean age 27 (s.d. 6) 100% male Ethnicity not reported 100% drug-using Alcohol use not reported Psychiatric history not reported Eligibility criteria: prisoners with a heroin problem, as confirmed by a detailed interview, who have at least 4 months remaining on their prison sentence at time of interview
Interventions	Secure establishment-based pharmacological intervention vs. waiting-list control. (I) methadone maintenance (n=191) vs. waiting-list control (n=191). (I) participants were given 30mg of methadone each day, increasing by 5mg every 3 days until 60mg was achieved; duration in treatment varied. Duration of waiting-list was 4 months
Outcomes	Drug testing (hair analysis; official records) during the last 2 months at 2 months follow-up Drug testing (hair analysis; official records) during the last 3 months at 3 months follow-up Drug testing (hair analysis; official records) during the last 4 months at 4 months follow-up
Notes	

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Yes	A - Adequate

Gottfredson 2002

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: unknown Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: partial
Participants	235 adults Mean age 34.9 (s.d. 7.6) 74.1% male 89.4% African American 100% drug-using

Gottfredson 2002 (Continued)

	Alcohol use not reported Psychiatric history not reported Eligibility criteria: non-violent drug-involved adult offenders
Interventions	Court-based sentencing intervention vs. treatment as usual. (I) drug court (n=139) vs. (C) routine parole/probation (n=96). Drug court involved intensive supervision including 3 contacts per week with the probation officer, 2 home visits per month, monthly verification of employment status, bi-weekly urine testing, weekly court hearings. Drug court also involved treatment for example outpatient, methadone maintenance, inpatient or transitional housing; intensity varied according to modality. Treatment was also available to the (C) group. Duration of drug court up to 24 months; duration and intensity of routine parole/probation not reported
Outcomes	Arrest for any offence (official records) during the last 12 months at 12 months follow-up Conviction for any offence (official records) during the last 12 months at 12 months follow-up Drug charge (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 24 months at 24 months follow-up Conviction for any offence (official records) during the last 24 months at 24 months follow-up Drug charge (official records) during the last 24 months at 24 months follow-up
Notes	Data also from: Gottfredson 2003

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Haapanen 2002

Methods	Allocation: random assignment Randomisation method: Adequate Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: adequate
Participants	1958 adults, young offenders & juveniles
Interventions	Community-based routine parole & drugs testing (once/twice) vs. routine parole & drugs testing (monthly) vs. routine parole & drugs testing (fortnightly) vs. routine parole & drugs testing (weekly) vs. routine parole
Outcomes	Arrest for any offence (official records) during the last 24 months at 24 months follow-up Arrest for any offence (official records) during the last 42 months at 42 months follow-up
Notes	I1, I2, I3, I4, C/I5?

Risk of bias

Haapanen 2002 (Continued)

Item	Authors' judgement	Description
Allocation concealment?	Yes	A - Adequate

Hanlon 1999

Methods	Allocation: random assignment Randomisation method: inadequate Similar on drug use: unknown Similar on criminal activity: unknown Blinding methodology: unknown Loss to follow-up: partial
Participants	536 adults
Interventions	Community-based social support program vs. weekly drugs testing & routine parole Community-based social support program vs. routine parole Community-based weekly drugs testing & routine parole vs. routine parole
Outcomes	Arrest (official records) during the last 12 months at 12 months follow-up Incarceration (official records) during the last 12 months at 12 months follow-up
Notes	I vs I1 I vs C I1 vs C

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	No	C - Inadequate

Henggeler 1999

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: no Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: adequate
Participants	118 juveniles
Interventions	Community-based multi-systemic therapy vs. community services as usual

Henggeler 1999 (Continued)

Outcomes	Drug use (not alcohol or marijuana; self-report) at post treatment follow-up Drug use (not alcohol or marijuana; self-report) at 6 months post treatment follow-up Delinquency Scale (self-report) at post treatment follow-up Delinquency Scale (self-report) at 6 months post treatment follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Martin 1993

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: unknown Similar on criminal activity: no Blinding methodology: unknown Loss to follow-up: partial	
Participants	365 adults	
Interventions	Communit-based ACT case management vs. routine parole	
Outcomes	Incarceration (official records) during the last 6 months at 6 months follow-up Drug use (self-report) during the last 6 months at 6 months follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Nielsen 1996

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: no Similar on criminal activity: no Blinding methodology: unknown Loss to follow-up: partial
Participants	689 adults & young offenders Age not reported 79.1% male 28.9% white 100% drug-using Alcohol use not reported Psychiatric history not reported Eligibility criteria: offenders with a history of drug use who were eligible for work release or parole and about to be released from prison
Interventions	Secure establishment-based therapeutic community vs. treatment as usual. (I) CREST work-release therapeutic community (n=248) vs. (C) routine work-release (n=441). (I) comprised 1 month of orientation followed by 2 months of primary treatment followed by 3 months of work release. The (I) was intensive given the nature of the intervention. Duration of (C) also 6 months, intensity not reported
Outcomes	Drug use (self-report) during the last 6 months at 6 months follow-up Drug use (self-report) during the last 18 months at 18 months follow-up Recidivism (arrested and charged) for any offence (self-report) during the last 6 months at 6 months follow-up Recidivism (arrested and charged) for any offence (self-report) during the last 18 months at 18 months follow-up
Notes	Farrell (2000) analysed a sub-set of this work, examining female offenders

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 a

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: unknown
Participants	173 adults

Petersilia 1992 a (Continued)

Interventions	Community-based intensive supervision vs. routine parole/probation	
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 b

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: No Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: unknown	
Participants	115 adults	
Interventions	Community-based intensive supervision vs. routine parole/probation	
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up	
Notes		
<i>Risk of bias</i>		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 c

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: unknown
Participants	58 adults
Interventions	Community-based intensive supervision vs. routine parole/probation
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up
Notes	

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 d

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: No Blinding methodology: unknown Loss to follow-up: unknown
Participants	53 adults
Interventions	Community-based intensive supervision vs. routine parole/probation
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up
Notes	

Risk of bias

Petersilia 1992 d (Continued)

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 e

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: No Blinding methodology: unknown Loss to follow-up: unknown
Participants	50 adults
Interventions	Community-based intensive supervision & increased surveillance vs. intensive supervision
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up
Notes	

Risk of bias

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 f

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: No Blinding methodology: unknown Loss to follow-up: unknown
Participants	50 adults
Interventions	Community-based intensive supervision & increased surveillance vs. intensive supervision
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up

Petersilia 1992 f (Continued)

	Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Petersilia 1992 g

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: No Blinding methodology: unknown Loss to follow-up: unknown	
Participants	50 adults	
Interventions	Community-based intensive supervision & increased surveillance vs. intensive supervision	
Outcomes	Recidivism for any offence (official records) during the last 12 months at 12 months follow-up Arrest for any offence (official records) during the last 12 months at 12 months follow-up Arrest for a drug offence (official records) during the last 12 months at 12 months follow-up Conviction (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Rossman 1999

Methods	Allocation: random assignment Randomisation method: unclear. Similar on drug use: No Similar on criminal activity: No Blinding methodology: unknown Loss to follow-up: adequate	
Participants	398 adults	

Interventions	Community-based Opportunity to Succeed aftercare vs. routine parole/probation	
Outcomes	Marijuana use (self-report) during the last 12 months at 12 months follow-up Marijuana use (self-report) during the last 3 months at 12 months follow-up Intense marijuana use (self-report) during the last 12 months at 12 months follow-up Hard drug use (self-report) during the last 12 months at 12 months follow-up Hard drug use (self-report) during the last 3 months at 12 months follow-up Intense hard drug use (self-report) during the last 12 months at 12 months follow-up Drug dealing (self-report) during the last 12 months at 12 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Sacks 2004

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: no Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: adequate
Participants	236 adults Mean age 34.3 (s.d. 8.8) 100% male 49% white 100% drug-using 32% alcohol-using 100% psychiatric history Eligibility criteria: prisoners who have both a serious mental disorder and a substance use disorder
Interventions	Secure establishment-based therapeutic community vs. treatment as usual. (I) Personal Reflections therapeutic community & voluntary residential aftercare (n=142) vs. (C) mental health program (n=94). (I) therapeutic community included psycho-educational classes, cognitive behavioural methods, medication and group therapy. Activities were attended 5 days per week for 4 to 5 hours per day with the rest of the day spent working in the prison; duration 12 months. (I) aftercare included mental health counselling, medication and psychiatric services and basic skills. Activities were attended 3 to 7 days per week for 3 to 5 hours per day; duration 6 months. (C) program included intensive psychiatric services with medication, weekly individual therapy and counselling and specialized groups of cognitive behavioural work, anger management, therapy and education, domestic violence, parenting and weekly drug/alcohol therapy with a 72-hour course on substance abuse education and relapse prevention; duration 12 months

Sacks 2004 (Continued)

Outcomes	Criminal activity regarding a new offence (official records) during the last 12 months at 12 months follow-up Incarceration for a new offence (official records) during the last 12 months at 12 months follow-up	
Notes		
Risk of bias		
Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Wexler 1999

Methods	Allocation: random assignment Randomisation method: unclear Similar on drug use: yes Similar on criminal activity: yes Blinding methodology: unknown Loss to follow-up: adequate	
Participants	715 adults Mean age 30.9 (s.d. 7.4) 100% male 37.8% white 100% drug-using Alcohol use not reported 100% psychiatric history Eligibility criteria: offenders with a drug problem who were between 9 and 14 months from parole. Offenders convicted of arson or sexual crimes to minors were not eligible	
Interventions	Secure establishment-based therapeutic community vs. no treatment. (I) Amity TC & voluntary residential aftercare (n=x) vs. (C) waiting-list control (n=x). (I) therapeutic community included a 2 to 3-month orientation phase, a 5 to 6-month treatment stage, and a 1 to 3-month re-entry phase; total duration 12 months. (I) included need assessment, education, group work, counselling and prison industry jobs. (I) aftercare duration up to 12 months. (C) duration not applicable	
Outcomes	Incarceration (official records) during the last 12 months at 12 months follow-up Incarceration (official records) during the last 24 months at 24 months follow-up Incarceration (official records) during the last 36 months at 36 months follow-up Incarceration (official records) during the last 60 months at 60 months follow-up Drug use (self-report) during the last 60 months at 60 months follow-up	
Notes		
Risk of bias		

Wexler 1999 (Continued)

Item	Authors' judgement	Description
Allocation concealment?	Unclear	B - Unclear

Characteristics of excluded studies [ordered by study ID]

Study	Reason for exclusion
Anglin 1999	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Dembo 2000	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods. The follow-up periods reported for the different groups were not equivalent
Di Nitto 2002	The follow-up periods reported for the different groups were not equivalent
Dugan 1998	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Grohman 2002	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Harrell 2001	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Henggeler 1991	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Henggeler 2002	The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Messina 2000	The population of the study was not 100% drug using offenders that were specifically referred by the criminal justice system to the intervention. The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Nemes 1998	The population of the study was not 100% drug using offenders that were specifically referred by the criminal justice system to the intervention. The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods
Nemes 1999	The population of the study was not 100% drug using offenders that were specifically referred by the criminal justice system to the intervention. The study did not report relevant drug and/or crime outcome measures at both the pre and post intervention periods

(Continued)

	periods
Stevens 1998	The study did not include an appropriate comparison group. The population of the study was not 100% drug using offenders that were specifically referred by the criminal justice system to the intervention

DATA AND ANALYSES

Comparison 1. RCT Courts (Britt studies 3 & 4): pre-trial release & drugs testing & sanctions vs. routine pre-trial release.

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Arrest at 90 days.	2	1124	Odds Ratio (M-H, Random, 95% CI)	1.33 [1.04, 1.70]

Comparison 2. RCT Secure Establishments (Sacks & Wexler): TC & aftercare vs. mental health program/waiting-list control.

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Incarceration at 1 year.	2	854	Odds Ratio (M-H, Random, 95% CI)	0.37 [0.16, 0.87]
2 Incarceration at 1 year: sensitivity analysis.	2	951	Odds Ratio (M-H, Random, 95% CI)	0.66 [0.38, 1.15]

Comparison 3. RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation.

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Recidivism at 1 year.	4	399	Odds Ratio (M-H, Random, 95% CI)	1.98 [1.01, 3.87]
2 Arrest at 1 year.	4	399	Odds Ratio (M-H, Random, 95% CI)	1.49 [0.88, 2.51]
3 Drug arrest at 1 year.	4	399	Odds Ratio (M-H, Random, 95% CI)	1.10 [0.50, 2.39]
4 Conviction at 1 year.	4	399	Odds Ratio (M-H, Random, 95% CI)	0.93 [0.55, 1.58]
5 Incarceration at 1 year.	4	399	Odds Ratio (M-H, Random, 95% CI)	0.88 [0.50, 1.54]

Comparison 4. RCT Community (Petersilia studies 5-7): int. supervision & increased surveillance vs. int. supervision.

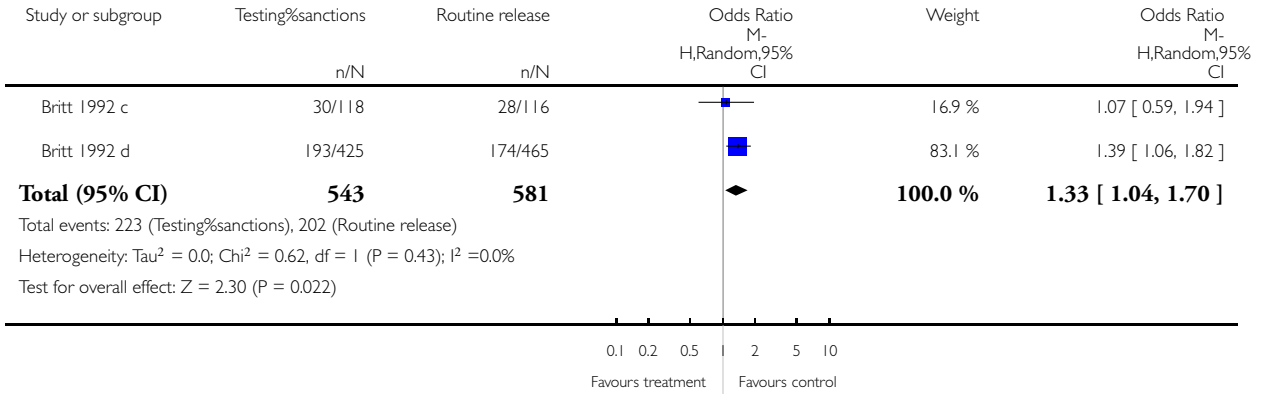
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Recidivism at 1 year.	3	150	Odds Ratio (M-H, Random, 95% CI)	2.09 [0.86, 5.07]
2 Arrest at 1 year.	3	150	Odds Ratio (M-H, Random, 95% CI)	1.22 [0.51, 2.88]
3 Drug arrest at 1 year.	3	150	Odds Ratio (M-H, Random, 95% CI)	1.29 [0.35, 4.85]
4 Conviction at 1 year.	3	150	Odds Ratio (M-H, Random, 95% CI)	1.14 [0.22, 5.91]
5 Incarceration at 1 year.	3	150	Odds Ratio (M-H, Random, 95% CI)	1.30 [0.39, 4.30]

Analysis 1.1. Comparison 1 RCT Courts (Britt studies 3 & 4): pre-trial release & drugs testing & sanctions vs. routine pre-trial release., Outcome 1 Arrest at 90 days..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 1 RCT Courts (Britt studies 3 & 4): pre-trial release % drugs testing % sanctions vs. routine pre-trial release.

Outcome: 1 Arrest at 90 days.

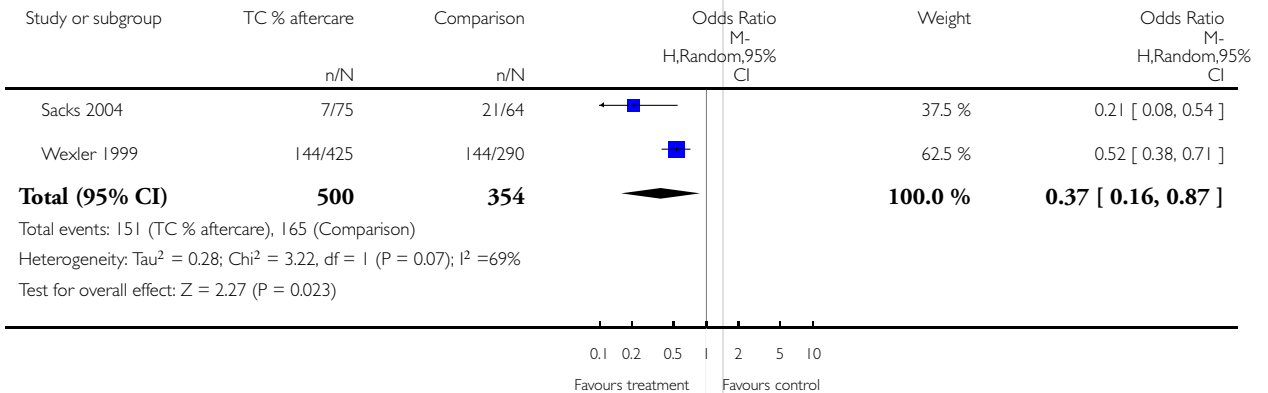


Analysis 2.1. Comparison 2 RCT Secure Establishments (Sacks & Wexler): TC & aftercare vs. mental health program/waiting-list control., Outcome 1 Incarceration at 1 year..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 2 RCT Secure Establishments (Sacks % Wexler): TC % aftercare vs. mental health program/waiting-list control.

Outcome: 1 Incarceration at 1 year.

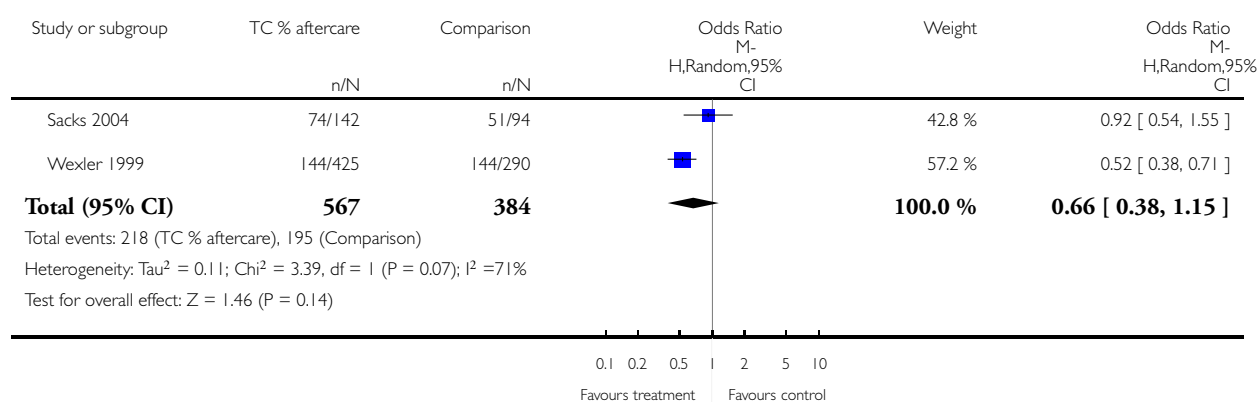


Analysis 2.2. Comparison 2 RCT Secure Establishments (Sacks & Wexler): TC & aftercare vs. mental health program/waiting-list control., Outcome 2 Incarceration at 1 year: sensitivity analysis..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 2 RCT Secure Establishments (Sacks % Wexler): TC % aftercare vs. mental health program/waiting-list control.

Outcome: 2 Incarceration at 1 year: sensitivity analysis.

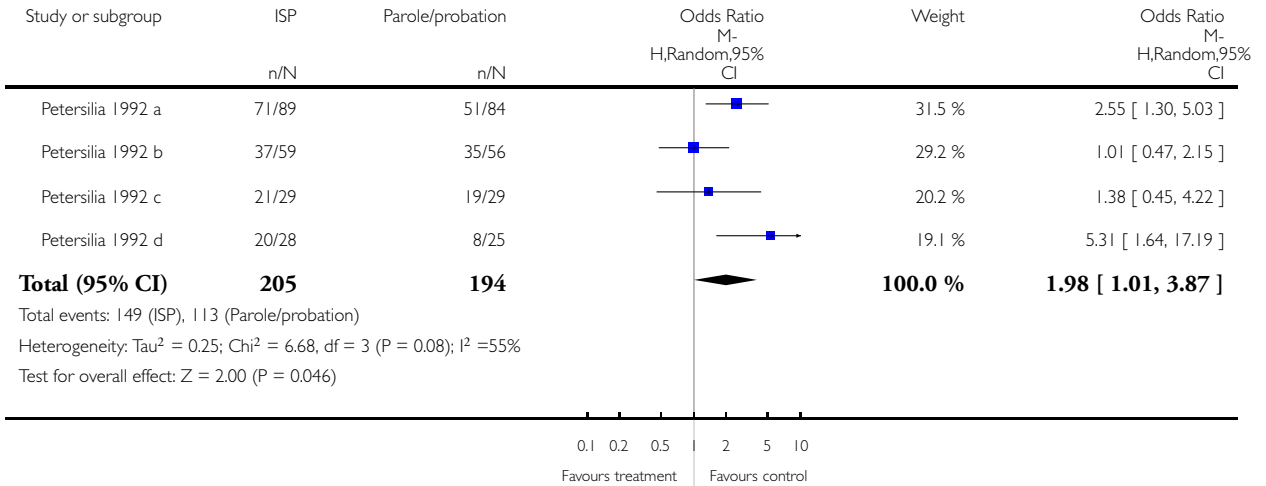


Analysis 3.1. Comparison 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation., Outcome 1 Recidivism at 1 year.

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation.

Outcome: 1 Recidivism at 1 year.

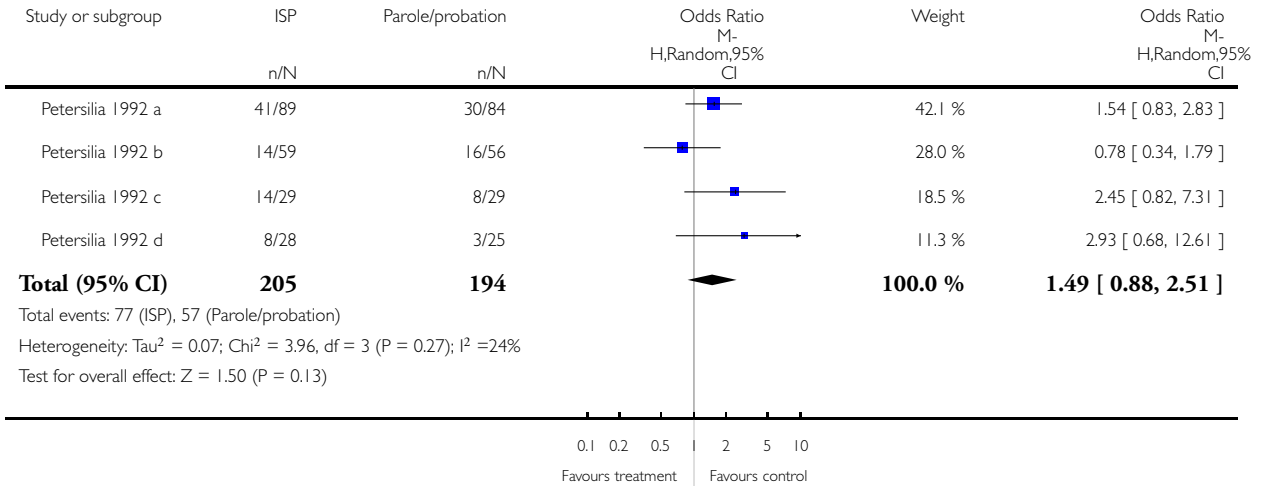


Analysis 3.2. Comparison 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation., Outcome 2 Arrest at 1 year..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation.

Outcome: 2 Arrest at 1 year.

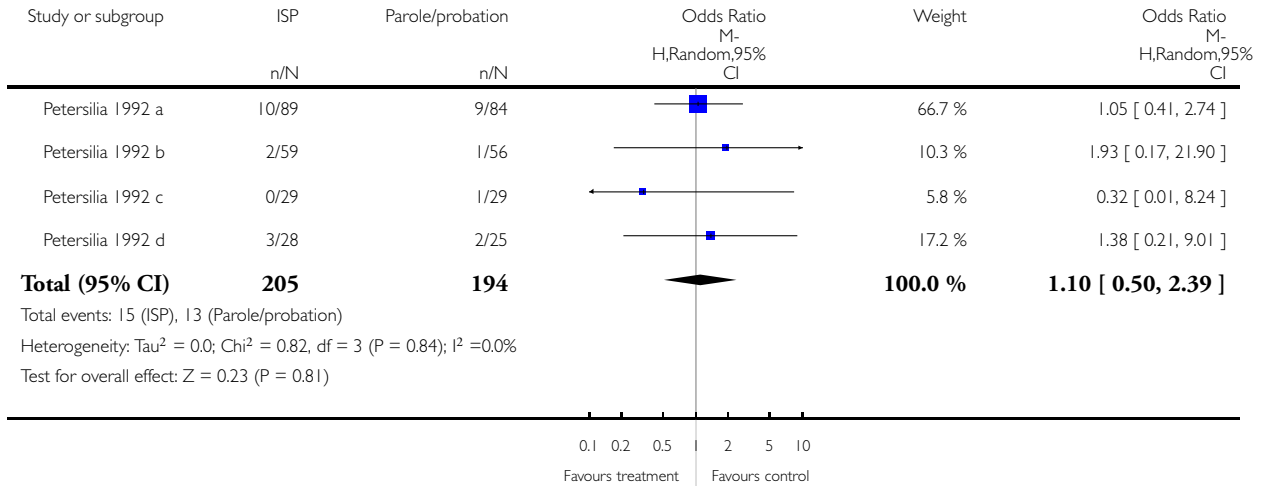


Analysis 3.3. Comparison 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation., Outcome 3 Drug arrest at 1 year.

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation.

Outcome: 3 Drug arrest at 1 year.

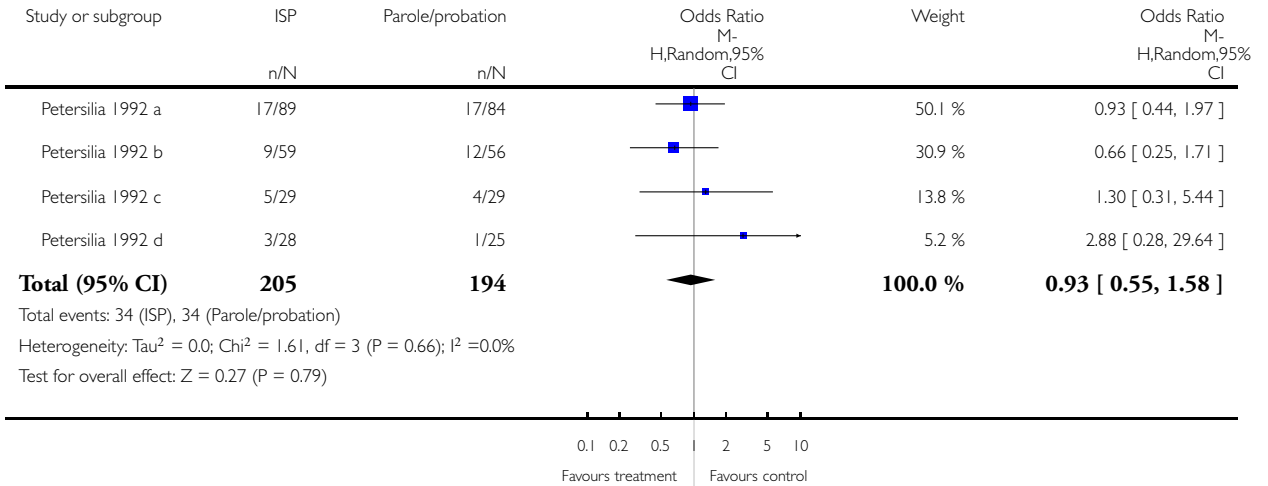


Analysis 3.4. Comparison 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation., Outcome 4 Conviction at 1 year..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation.

Outcome: 4 Conviction at 1 year.

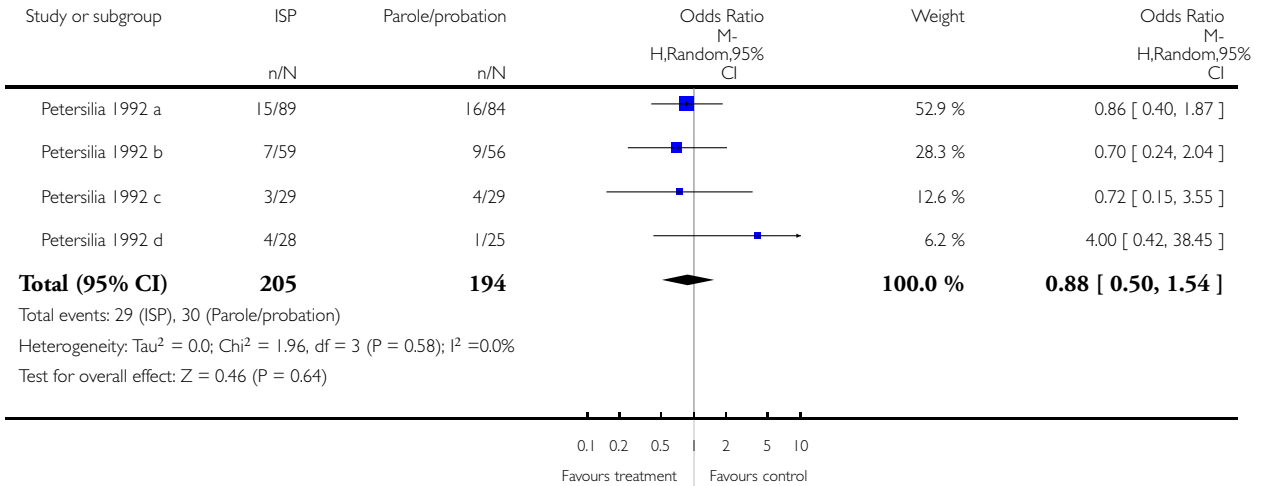


Analysis 3.5. Comparison 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation., Outcome 5 Incarceration at 1 year..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 3 RCT Community (Petersilia studies 1-4): intensive supervision vs. routine parole/probation.

Outcome: 5 Incarceration at 1 year.

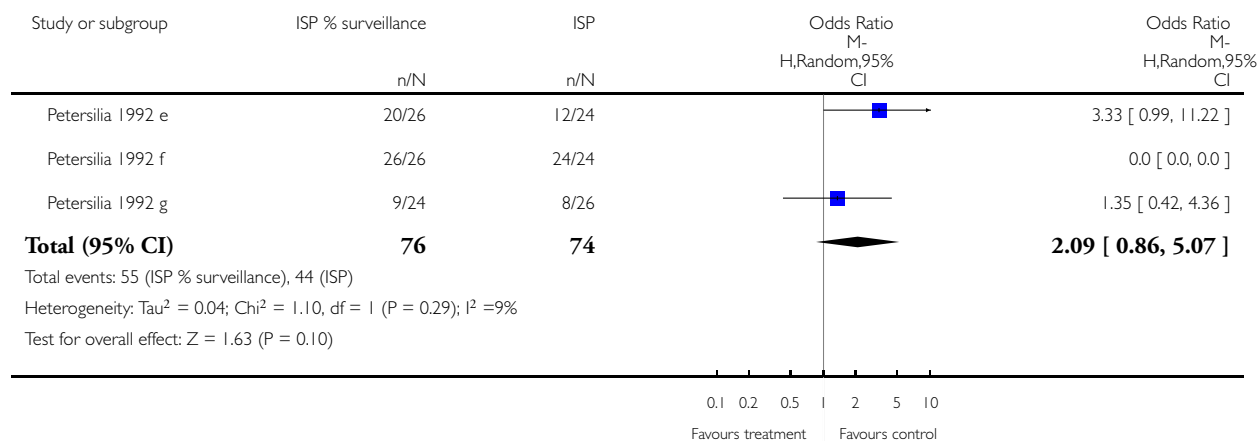


Analysis 4.1. Comparison 4 RCT Community (Petersilia studies 5-7): int. supervision & increased surveillance vs. int. supervision., Outcome 1 Recidivism at 1 year.

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 4 RCT Community (Petersilia studies 5-7): int. supervision % increased surveillance vs. int. supervision.

Outcome: 1 Recidivism at 1 year.

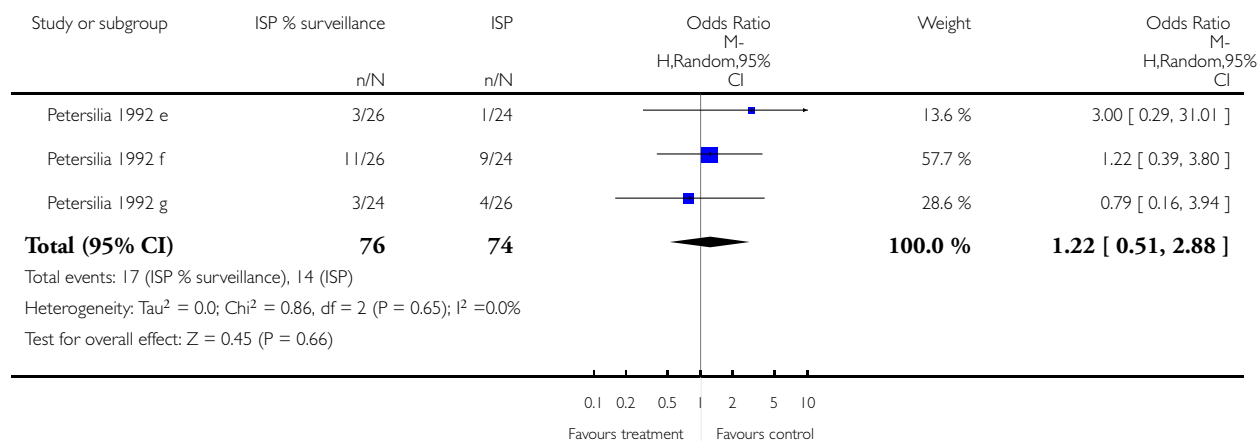


Analysis 4.2. Comparison 4 RCT Community (Petersilia studies 5-7): int. supervision & increased surveillance vs. int. supervision., Outcome 2 Arrest at 1 year.

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 4 RCT Community (Petersilia studies 5-7): int. supervision % increased surveillance vs. int. supervision.

Outcome: 2 Arrest at 1 year.

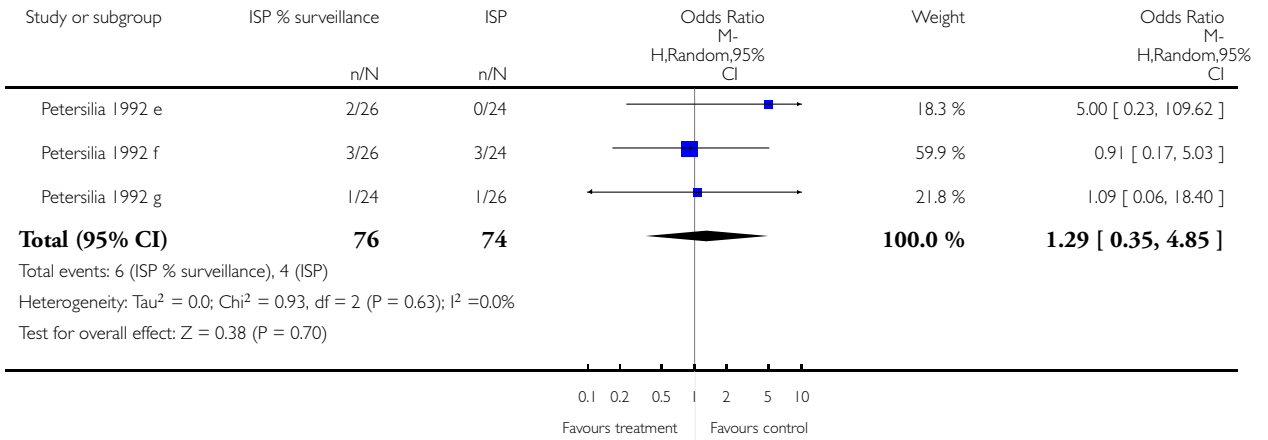


Analysis 4.3. Comparison 4 RCT Community (Petersilia studies 5-7): int. supervision & increased surveillance vs. int. supervision., Outcome 3 Drug arrest at 1 year..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 4 RCT Community (Petersilia studies 5-7): int. supervision % increased surveillance vs. int. supervision.

Outcome: 3 Drug arrest at 1 year.

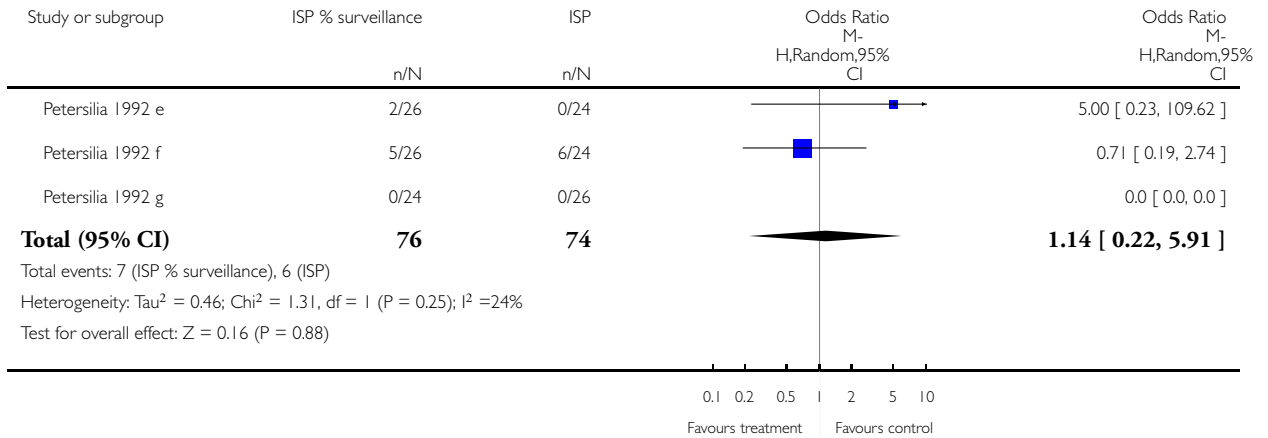


Analysis 4.4. Comparison 4 RCT Community (Petersilia studies 5-7): int. supervision & increased surveillance vs. int. supervision., Outcome 4 Conviction at 1 year.

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 4 RCT Community (Petersilia studies 5-7): int. supervision % increased surveillance vs. int. supervision.

Outcome: 4 Conviction at 1 year.

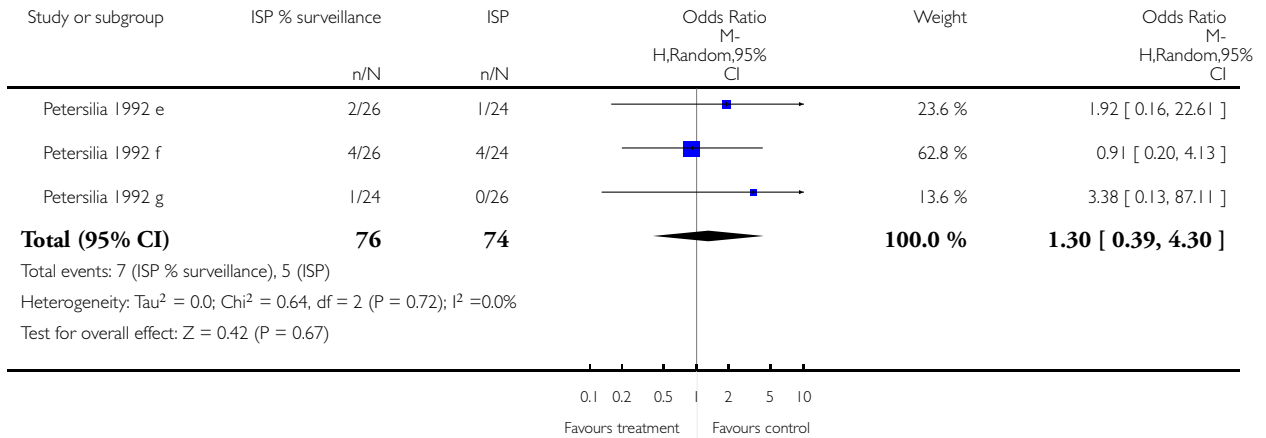


Analysis 4.5. Comparison 4 RCT Community (Petersilia studies 5-7): int. supervision & increased surveillance vs. int. supervision., Outcome 5 Incarceration at 1 year..

Review: Interventions for drug-using offenders in the courts, secure establishments and the community.

Comparison: 4 RCT Community (Petersilia studies 5-7): int. supervision % increased surveillance vs. int. supervision.

Outcome: 5 Incarceration at 1 year.



ADDITIONAL TABLES

Table 1. MEDLINE

MEDLINE search
1. exp "Substance-Related-Disorders"/
2. ((drug or substance) adj (abuse* or addict* or dependen* or misuse*)).ti,ab
3. (drug* adj (treat* or intervention* or program*))
4. substance near (treat* or intervention* or program*)
5.(detox* or methadone) in ti,ab
6. narcotic* near (treat* or intervention* or program*)
7. 1 or 2 or 3 or 4 or 5 or 6
8. prison*. ti,ab
9. exp "Prisoners"/

Table 1. MEDLINE (Continued)

10. offender* or criminal* or inmate* or convict* or probation* or remand or felon*).ti,ab
11. exp "Prisons"/
12. 8 or 9 or 10 or 11
13. 7 and 12

Table 2. EMBASE

Embase search
1. (detox\$ or methadone or antagonist prescri\$).ti,ab.
2. detoxification/ or drug detoxification/ or drug withdrawal/ or drug dependence treatment/ or methadone/ or methadone treatment/ or diamorphine/ or naltrexone/
3. (diamorphine or naltrexone or therapeutic communit\$).ti,ab
4. morality/
5. (motivational interview\$ or motivational enhancement).ti,ab
6. (counselling or counseling).ti,ab.
7. exp counseling/
8. (psychotherap\$ or cognitive behavioral or cognitive behavioural).ti,ab
9. exp psychotherapy/
10. (moral adj3 training).ti,ab.
11. (cognitive restructuring or assertiveness training).ti,ab
12. reinforcement/ or self monitoring/ or self control/
13. (relaxation training or rational emotive or family relationship therap\$).ti,ab
14. social learning/ or withdrawal syndrome/ or coping behavior/
15. (community reinforcement or self monitoring or self control or self management or interpersonal skills).ti,ab
16. (goal\$ adj3 setting).ti,ab.
17. (social skills adj3 training).ti,ab.

Table 2. EMBASE (Continued)

18. anger/ or lifestyle/
19. (basic skills adj3 training).ti,ab.
20. (relapse adj3 prevent\$).ti,ab.
21. (craving adj3 (minimi\$ or reduc\$)).ti,ab.
22. (trigger or triggers or coping skills or anger management or group work).ti,ab
23. (lifestyle adj3 modifi\$).ti,ab.
24. (high intensity training or resettlement or throughcare or aftercare or after care).ti,ab
25. aftercare/ or halfway house/
26. (brief solution or brief intervention\$ or minnesota program\$ or 12 step\$ or twelve step\$).ti,ab
27. (needle exchange or nes or syringe exchange or dual diagnosis or narcotics anonymous).ti,ab
28. self help/ or support group/
29. (self-help or selfhelp or self help or outreach or bail support or arrest referral\$).ti,ab
30. exp urinalysis/ or rehabilitation/ or rehabilitation center/
31. (diversion or dtto or dttos or drug treatment or testing order\$ or carat or carats).ti,ab
32. (combined orders or drug-free or drug free).ti,ab.
33. (peer support or evaluation\$ or urinalysis or drug testing or drug test or drug tests).ti,ab
34. ((rehab or rehabilitation or residential or discrete) adj2 (service\$ or program\$)).ti,ab
35. (asro or addressing substance\$ or pasro or prisons addressing or acupuncture or shock or boot camp or boot camps).ti,ab
36. (work ethic camp\$ or drug education or tasc or treatment accountability).ti,ab
37. exp acupuncture/
38. or/1-36
39. (remand or prison or prisoner or prisoners or offender\$ or criminal\$ or probation or court or courts).ti,ab
40. (secure establishment\$ or secure facilit\$).ti,ab.

Table 2. EMBASE (Continued)

41. (reoffend\$ or reincarcerat\$ or recidivi\$ or ex-offender\$ or jail or jails or goal or goals).ti,ab
42. (incarcerat\$ or convict or convicts or convicted or felon or felons or conviction\$ or revocation or inmate\$ or high security).ti,ab
43. criminal justice/ or custody/ or detention/ or prison/ or prisoner/ or offender/ or probation/ or court/ or recidivism/ or crime/ or criminal behavior/ or punishment/
44. or/39-43
45. 38 and 44
46. (substance abuse\$ or substance misuse\$ or substance use\$).ti,ab
47. (drug dependanc\$ or drug abuse\$ or drug use\$ or drug misuse\$ or drug addict\$).ti,ab
48. (narcotics adj3 (addict\$ or use\$ or misuse\$ or abuse\$)).ti,ab
49. (chemical dependanc\$ or opiates or heroin or crack or cocaine or amphetamines or addiction or dependance disorder or drug involved).ti,ab
50. substance abuse/ or drug abuse/ or analgesic agent abuse/ or drug abuse pattern/ or drug misuse/ or intravenous drug abuse/ or multiple drug abuse/
51. addiction/ or drug dependence/ or narcotic dependence/ or exp narcotic agent/ or narcotic analgesic agent/
52. opiate addiction/ or heroin dependence/ or morphine addiction/
53. cocaine/ or amphetamine derivative/ or psychotropic agent/
54. or/46-53
55. 45 and 54
56. limit 55 to yr=1980-2004

Table 3. PsycInfo

PsycInfo
1. (detoxification in de) or (drug withdrawal in de)
2. (drug usage screening in de) or (methadone maintenance) in de
3. explode "Narcotic-Antagonists" in DE
4. 1 or 2 or 3

Table 3. PsycInfo (Continued)

5. (counseling in de) or (explode “psychotherapeutic-counseling” in de)
6. (explode “cognitive-therapy” in de) or (explode “psychotherapeutic-techniques” in de)
7. (cognitive restructuring in de) or (assertiveness training in de)
8. explode “relaxation-therapy” in de
9. (rational emotive therapy in de) or (rational-emotive therapy in de)
10. (explode “self monitoring” in de) or (explode self-monitoring) in de
11. (goal setting in de) or (self control in de) or (explode “self-management” in de)
12. (social skills in de) or (relapse prevention in de) or (craving in de) or (coping behavior in de)
13. (anger control in de) or (explode “group-psychotherapy” in de) or (brief psychotherapy in de)
14. (explode “behavior-modification” in de) or (posttreatment followup in de) or (aftercare in de)
15. (halfway houses in de) or (twelve step programs in de)
16. (dual diagnoses in de) or (explode “self help techniques” in de) or (outreach programs in de) or (court referrals in de)
17. (peer pressure in de) or (urinalysis in de)
18. (drug rehabilitation in de) or (residential care institutions in de) or (acupuncture in de) or (drug education in de)
19. (detox* or methadone or antagonist prescri* or diamorphine or naltrexone or therapeutic communit*) in ti,ab
20. (motivational interview* or motivational enhancemen* or counseling or psychotherapy or psychotherapies) in ti,ab
21. (cognitive behav* or cognitive therapy or cognitive therapies or moral training or cognitive restructuring) in ti,ab
22. (assertiveness training or relaxation training or relaxation therapy or relaxation therapies) in ti,ab
23. (rational emotive therap* or rational emotive behav* therap* or family relationship therap* or community reinforcement) in ti,ab
24. (self-monitor* or self monitor* or goal setting or self control or self-control or self management or self-management) in ti,ab
25. (interpersonal skills training or social skills training or basic skills training) in ti,ab
26. (relapse with prevent*) in ti,ab
27. (craving near reduc*) in ti,ab

Table 3. PsycInfo (Continued)

28. craving with (reduc* in ti,ab)
29. (trigger* or coping skills or anger management or group work or lifestyle modif* or high intensity training or resettlement) in ti, ab
30. (throughcare or aftercare or after care or brief solution* or brief intervention*) in ti,ab
31. (minnesota or 12 step* or twelve step* or needle exchange or nes or syringe exchange or dual diagnosis) in ti,ab
32. (narcotics anonymous or self-help or self help or outreach or bail support or arrest referral*) in ti,ab
33. (diversion or dtto* or testing order* or carat* or counseling assessment referral or combined order or combined orders or drug free wing* or drug free environment*) in ti,ab
34. (peer support or user evaluations or urinalysis or urinalyses or mandatory drug test* or rehabilitation or discrete service* or discrete program*) in ti,ab
35. (residential program* or residential scheme* or asro or addressing substance* or pasro or prisons addressing substance) in ti,ab
36. (acupuncture or shock or boot camp* or work ethic or drug education or tasc or treatment accountability) in ti,ab
37. or/4-36
38. (secure facilities or convict* or revocation or inmate* or high security) in ti,ab
39. (prisoners in de) or (explode "correctional-institutions" in de)
40. (perpetrators in de) or (explode criminals in de)
41. (probation in de) or (parole in de) or (incarceration in de) or (recidivism in de) or (criminal conviction in de) or (crime in de)
42. (remand or prison* or offender* or criminal* or probation or court or courts or secure establishment* or reoffend* or reincarcerat* or recidivi* or ex-offender* or jail or jails or incarcerat*) in ti,ab
43. (drug abuse in de) or (explode "inhalant-abuse" in de) or (explode "drug-dependency" in de)
44. (polydrug abuse in de) or (drug abuse in de) or (intravenous drug usage in de)
45. (narcotic drugs in de) or (heroin in de) or (cocaine in de) or (explode amphetamine in de)
46. (substance abuse* or substance misuse* or substance user*) in ti,ab
47. (drug dependen* or drug abuse* or drug misuse* or drug addict* or drug use) in ti,ab
48. (narcotic abuse* or narcotic misuse* or chemical dependen* or opiate misuse* or opiate abuse*) in ti,ab
49. (heroin use* or heroin addict* or heroin misuse* or heroin abuse*) in ti,ab

Table 3. PsycInfo (Continued)

50. (crack use* or crack addict* or crack misuse* or crack abuse*) in ti,ab
51. (cocaine use* or cocaine addict* or cocaine misuse* or cocaine abuse*) in ti,ab
52. (amphetamine* use* or amphetamine* addict* or amphetamine* misuse* or amphetamine* abuse*) in ti,ab
53. (dependence disorder or drug involved or dug-involved) in ti,ab
54. #38 or #39 or #40 or #41 or #42
55. #4 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53
56. #37 and #54 and #55

Table 4. SPECTRA

SPECTRA search
1. {remand} or {prison} or {offender} or {criminal} or {probation} or {court} or {tribunal} or {secure establishment} or {secure facilit} or {reoffend} or {reincarcat} or {recidivi} or {ex-offender} or {jail} or {incarcat} or {convict} or {felon} or {reconvict} or {high security} or {law enforcement} {remand} or {prison} or {offender} or {criminal} or {probation} or {court} or {tribunal} or {secure establishment} or {secure facilit} or {reoffend} or {reincarcat} or {recidivi} or {ex-offender} or {jail} or {incarcat} or {convict} or {felon} or {reconvict} or {high security} or {law enforcement}
2. {substance} or {dependenc} or {drug abuse} or {drug use} or {drug misuse} or {addict}
All indexed fields: {remand} or {prison} or {offender} or {criminal} or {probation} or {court} or {tribunal} or {secure establishment} or {secure facilit} or {reoffend} or {reincarcat} or {recidivi} or {ex-offender} or {jail} or {incarcat} or {convict} or {felon} or {reconvict} or {high security} or {law enforcement}
OR
All unindexed fields: {remand} or {prison} or {offender} or {criminal} or {probation} or {court} or {tribunal} or {secure establishment} or {secure facilit} or {reoffend} or {reincarcat} or {recidivi} or {ex-offender} or {jail} or {incarcat} or {convict} or {felon} or {reconvict} or {high security} or {law enforcement}
AND
All unindexed fields: {substance} or {dependenc} or {drug abuse} or {drug use} or {drug misuse} or {addict} or {narcotics} or {opiates} or {heroin} or {crack} or {cocaine} or {amphetamines} or {drug involved} or {substance-related} or {amphetamine-related} or {cocaine-related} or {marijuana} or {opioid} or {street drug} or {designer drug}
3. narcotics
4. opiates
5. heroin
6. {crack}
7. cocaine

Table 4. SPECTRA (Continued)

8. amphetamines
9. drug involved
10. substance-related
11. amphetamine-related
12. cocaine-related
13. marijuana
14. opioid
15. street drug
16. designer drug
17. 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16
18. 1 AND 17

Table 5. PASCAL, SciSearch, Social SciSearch, Wilson Applied Science and Technology Abstr

PASCAL search
1. (DETOX? OR METHADONE OR ANTAGONIST()PRESCRI?)/TI,AB
2. METHADONE/DE OR NALTREXONE/DE
3. (DIAMORPHINE OR NALTREXONE)/TI,AB
4. THERAPEUTIC()COMMUNITY/DE OR THERAPEUTIC()COMMUNIT?)/TI,AB
5. (MOTIVATIONAL()INTERVIEW? OR MOTIVATIONAL()ENHANCEMENT)/TI,AB
6. (COUNSELLING OR COUNSELING)/TI,AB
7. COUNSELING/DE
8. (PSYCHOTHERAP? OR COGNITIVE()BEHAVIORAL OR COGNITIVE()BEHAVIOURAL)/TI,AB
9. PSYCHOTHERAPY!/DE
10. (MORAL(3W)TRAINING)/TI,AB
11. (COGNITIVE()RESTRUCTURING OR ASSERTIVENESS()TRAINING)/TI,AB

Table 5. PASCAL, SciSearch, Social SciSearch, Wilson Applied Science and Technology Abstr (Continued)

12. ASSERTIVENESS/DE OR RELAXATION()TECHNIQUES/DE
13. (RELAXATION()TRAINING OR RATIONAL()EMOTIVE OR FAMILY()RELATIONSHIP()THERAP?)/TI,AB
14. FAMILY()RELATIONS/DE
15. (COMMUNITY()REINFORCEMENT OR SELF()MONITORING OR SELF()CONTROL OR SELF()MANAGEMENT OR INTERPERSONAL()SKILLS)/TI,AB
16. (GOAL?(3W)SETTING)/TI,AB
17. (SOCIAL(3W)TRAINING)/TI,AB
18. SOCIAL RESPONSIBILITY/DE
19. (BASIC()SKILLS(3W)TRAINING)/TI,AB
20. (RELAPSE(3W)PREVENT?)/TI,AB
21. (CRAVING(3W)(MINIMI? OR REDUC?))/TI,AB
22. (TRIGGER OR TRIGGERS OR COPING()SKILLS OR ANGER()MANAGEMENT OR GROUP()WORK)/TI,AB
23. (LIFESTYLE(3W)MODIFI?)/TI,AB
24. (HIGH()INTENSITY()TRAINING OR RESETTLEMENT OR THROUGH-CARE OR AFTER-CARE OR AFTER()CARE)/TI,AB
25. ADAPTATION,-PSYCHOLOGICAL!/DE OR ANGER/DE OR LIFE()STYLE/DE OR AFTER()CARE/DE OR HALFWAY()HOUSES/DE
26. (BRIEF()SOLUTION OR BRIEF()INTERVENTION? OR MINNESOTA()PROGRAM? OR 12()STEP? OR TWELVE()STEP?)/TI,AB
27. (NEEDLE()EXCHANGE OR NES OR SYRINGE()EXCHANGE OR DUAL()DIAGNOSIS OR NARCOTICS()ANONYMOUS)/TI,AB
28. NEEDLE-EXCHANGE()PROGRAMS/DE
29. (SELF-HELP OR SELFHELP OR SELF()HELP OR OUTREACH OR BAIL()SUPPORT OR ARREST()REFERRAL?)/TI,AB
30. SELF-HELP()GROUPS/DE OR URINALYSIS/DE OR SUBSTANCE()ABUSE()DETECTION/DE
31. (DIVERSION OR DTTO OR DTTOS OR DRUG()TREATMENT OR TESTING()ORDER? ? OR CARAT OR CARATS)/TI,AB
32. (COMBINED()ORDERS OR DRUG-FREE OR DRUG()FREE)/TI,AB

Table 5. PASCAL, SciSearch, Social SciSearch, Wilson Applied Science and Technology Abstr (Continued)

33. (PEER)SUPPORT OR EVALUATION? ? OR URINALYSIS OR DRUG()TESTING OR DRUG()TEST? ?)/TI,AB
34. ((REHAB OR REHABILITATION OR RESIDENTIAL OR DISCRETE)(2W)(SERVICE? ? OR PROGRAM?))/TI,AB
35. (ASRO OR ADDRESSING()SUBSTANCE? OR PASRO OR PRISONS()ADDRESSING OR ACUPUNCTURE OR SHOCK OR BOOT()CAMP OR BOOT()CAMPS)/TI,AB
36. (WORK()ETHIC()CAMP? ? OR DRUG()EDUCATION OR TASC OR TREATMENT()ACCOUNTABILITY)/TI,AB
37. ACUPUNCTURE-THERAPY!/DE OR ACUPUNCTURE/DE OR HEALTH()EDUCATION/DE OR SUBSTANCE()ABUSE()TREATMENT()CENTERS/DE
38. S1:S3
39. S4:S37
40. S38 AND S39
40. (REMAND OR PRISON OR PRISONER OR PRISONERS OR OFFENDER? ? OR CRIMINAL? ? OR PROBATION OR COURT OR COURTS)/TI,AB
41. (SECURE()ESTABLISHMENT? ? OR SECURE()FACILIT?)/TI,AB
42. (REOFFEND? OR REINCARCERAT? OR RECIDIVI? OR EX()OFFENDER? ? OR JAIL OR JAILS)/TI,AB
43. (INCARCERAT? OR CONVICT OR CONVICTS OR CONVICTED OR FELON? ? OR CONVICTION? ? OR REVOCATION OR INMATE? ? OR HIGH()SECURITY)/TI,AB
44. PRISONERS/DE OR LAW()ENFORCEMENT/DE OR JURISPRUDENCE/DE
45. S40:S44
46. S40 AND S45
47. (SUBSTANCE()ABUSE? OR SUBSTANCE()MISUSE? OR SUBSTANCE()USE?)/TI,AB
48. (DRUG()DEPENDANC? OR DRUG()ABUSE? OR DRUG()USE? OR DRUG()MISUSE? OR DRUG()ADDICT?)/TI,AB
49. (NARCOTICS(3W)(ADDICT? OR USE? OR MISUSE? OR ABUSE?))/TI,AB
50. (CHEMICAL()DEPENDANC? OR OPIATES OR HEROIN OR CRACK OR COCAINE OR AMPHETAMINES OR ADDICTION OR DEPENDENCE()DISORDER OR DRUG()INVOLVED)/TI,AB
51. SUBSTANCE-RELATED()DISORDERS/DE OR AMPHETAMINE-RELATED()DISORDERS/DE OR COCAINE-RELATED()DISORDERS/DE OR MARIJUANA ()ABUSE/DE
52. OPIOID-RELATED-DISORDERS!/DE OR PHENCYCLIDINE()ABUSE/DE OR SUBSTANCE()ABUSE()INTRAVENOUS/DE

Table 5. PASCAL, SciSearch, Social SciSearch, Wilson Applied Science and Technology Abstr (Continued)

53. STREET()DRUGS/DE OR DESIGNER()DRUGS/DE OR NARCOTICS/DE
54. COCAINE!/DE OR AMPHETAMINES!/DE OR ANALGESICS()OPIOID/DE
55. S47:S54
56. S46 AND S55
57. (DETOXIFICATION OR METHADONE OR ANTAGONIST-PRESCRIBING)/DE FROM 144,34,434,7,99,65,35,6
58. (DIAMORPHINE OR NALTREXONE)/DE FROM 144,34,434,7,99,65,35,6
59. THERAPEUTIC-COMMUNITY)/DE FROM 144,34,434,7,99,65,35,6
60. (MOTIVATIONAL-INTERVIEW OR MOTIVATIONAL-ENHANCEMENT)/DE FROM 144,34,434,7,99,65,35,6
61. (COUNSELLING OR COUNSELING)/DE FROM 144,34,434,7,99,65,35,6
62. (PSYCHOTHERAPY! OR COGNITIVE-BEHAVIORAL OR COGNITIVE-BEHAVIOURAL)/DE FROM 144,34,434,7,99,65,35,6
63. (MORAL-TRAINING)/DE FROM 144,34,434,7,99,65,35,6
64. (COGNITIVE-RESTRUCTURING OR ASSERTIVENESS-TRAINING)/DE FROM 144,34,434,7,99,65,35,6
65. (RELAXATION-TRAINING OR RATIONAL-EMOTIVE OR FAMILY-RELATIONSHIP-THERAPY)/DE FROM 144,34,434,7,99,65,35,6
66. FAMILY-RELATIONS/DE
67. (COMMUNITY-REINFORCEMENT OR SELF-MONITORING OR SELF-CONTROL OR SELF-MANAGEMENT OR INTERPERSONAL-SKILLS)/DE FROM 44,34,434,7,99,65,35,6
68. (GOAL-SETTING)/DE FROM 144,34,434,7,99,65,35,6
69. (SOCIAL-SKILLS-TRAINING)/DE FROM 144,34,434,7,99,65,35,6
70. SOCIAL-RESPONSIBILITY/DE
71. (BASIC-SKILLS-TRAINING)/DE FROM 144,34,434,7,99,65,35,6
72. (RELAPSE-PREVENTION)/DE FROM 144,34,434,7,99,65,35,6
73. CRAVING/DE FROM 144,34,434,7,99,65,35,6
74. (TRIGGER OR COPING-SKILLS OR ANGER-MANAGEMENT OR GROUP-WORK)/DE FROM 144,34,434,7,99,65,35,6
75. (LIFESTYLE-MODIFICATION)/DE FROM 144,34,434,7,99,65,35,6

Table 5. PASCAL, SciSearch, Social SciSearch, Wilson Applied Science and Technology Abstr (Continued)

76. (HIGH-INTENSITY-TRAINING OR RESETTLEMENT OR THROUGH-CARE OR AFTER-CARE OR AFTER-CARE)/DE FROM 144,34,434,7,99,65,35,6
77. (BRIEF-SOLUTION OR BRIEF-INTERVENTIONS OR MINNESOTA-PROGRAM OR 12-STEP-PROGRAM OR TWELVE-STEP-PROGRAM)/DE FROM 144,34,434,7,99,65,35,6
77. (NEEDLE-EXCHANGE OR SYRINGE-EXCHANGE OR DUAL-DIAGNOSIS OR NARCOTICS-ANONYMOUS)/DE FROM 144,34,434,7,99,65,35,6
79. (SELF-HELP OR OUTREACH OR BAIL-SUPPORT OR ARREST-REFERRAL)/DE FROM 144,34,434,7,99,65,35,6
80. (DRUG-TREATMENT OR TESTING-ORDERS OR CARAT)/DE FROM 144,34,434,7,99,65,35,6
81. (COMBINED-ORDERS OR DRUG-FREE)/DE FROM 144,34,434,7,99,65,35,6
82. (PEER-SUPPORT OR EVALUATION OR URINALYSIS OR DRUG-TESTING OR DRUG-TESTS)/DE FROM 144,34,434,7,99,65,35,6
83. (REHABILITATION OR RESIDENTIAL OR DISCRETE-SERVICES)/DE FROM 144,34,434,7,99,65,35,6
84. (ASRO OR PASRO ACUPUNCTURE OR BOOT-CAMP)/DE FROM 144,34,434,7,99,65,35,6
85. (WORK-ETHIC-CAMP OR DRUG-EDUCATION OR TASC OR TREATMENT-ACCOUNTABILITY)/DE FROM 144,34,434,7,99,65,35,6
86. (REMAND OR PRISON OR PRISONER OR PRISONERS OR OFFENDER OR OFFENDERS OR CRIMINAL OR CRIMINALS OR PROBATION OR COURT OR COURTS)/DE FROM 144,34,434,7,99,65,35,6
87. (SECURE-ESTABLISHMENTS OR SECURE-FACILITY)/DE FROM 144,34,434,7,99,65,35,6
88. (REOFFENDERS OR REINCARCERATION OR RECIDIVISM OR EX-OFFENDERS OR JAILS)/DE FROM 144,34,434,7,99,65,35,6
89. (INCARCERATION OR CONVICT OR CONVICTS OR FELON OR FELONS OR CONVICTIONS OR REVOCATION OR INMATE OR INMATES OR HIGH-SECURITY)/DE FROM 144,34,434,7,99,65,35,6
90. (SUBSTANCE-ABUSE OR SUBSTANCE-MISUSE OR SUBSTANCE-USE)/DE FROM 144,34,434,7,99,65,35,6
91. (DRUG-DEPENDANCE OR DRUG-DEPENDENCY OR DRUG-ABUSE OR DRUG-MISUSE OR DRUG-ADDICT OR DRUG-ADDICTION)/DE FROM 144,34,434,7,99,65,35,6
92. (CHEMICAL-DEPENDANCY OR OPIATE-DEPENDENCY OR HEROIN-DEPENDENCY OR CRACK-DEPENDENCY OR COCAINE-DEPENDENCY OR AMPHETAMINES OR ADDICTION OR DEPENDENCE-DISORDER OR DRUG-INVOLVED)/DE FROM 144,34,434,7,99,65,35,6
93. S40 OR S57:S85
94. S45 OR S86:S89

Table 5. PASCAL, SciSearch, Social SciSearch, Wilson Applied Science and Technology Abstr (Continued)

95. S55 OR S90:S92
96. S93 AND S94 AND S95
97. S96/1980-2004

Table 6. The CENTRAL Register of Controlled Trials

CENTRAL search
1. prison*
2. offender*
3. (criminal* or probation or court*)
4. (secure next establishment*)
5. reoffend*
6. reincarcerat*
7. recidiv*
8. exoffend*
9. (jail or jails or incarcerat*)
10. (secure next facilit*)
10(secure next facilit*)
11. (convict* or revocation or inmate* or (high next security))
12. PRISONERS
13. LAW ENFORCEMENT
14. JURISPRUDENCE
15. CRIME
16. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15
17. SUBSTANCE-RELATED DISORDERS
18. ((substance or drug*) next (abuse* or misuse* or dependen*or use* or addict*))

Table 6. The CENTRAL Register of Controlled Trials (Continued)

19. (narcotics or chemical or opiate) next (dependen* or addict* or abuse* or misuse*)
20. ((heroin) next (addict* or dependen* or misuse* or abuse*))
21. ((crack) next (addict* or dependen* or misuse* or abuse* or use*))
22. ((cocaine next addict*) or (cocaine next dependenc*) or (cocaine next misuse*) or (cocaine next abuse*) or (cocaine next use*))
23. ((amphetamine*) next (addict* or dependen* or misuse* or abuse* or use*))
24. (addicts or (dependence next disorder) or (drug next involved))
25. (street next drugs)
26. STREET DRUGS
27. DESIGNER DRUGS
28. NARCOTICS
29. COCAINE
30. AMPHETAMINES
31. ANALGESICS ADDICTIVE
32. ANALGESICS OPIOID
33. PSYCHOTROPIC DRUGS
34. opioid* or opiat*
35. #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34
35. (#16 and #35)

Table 7. SIGLE

SIGLE
1. ((reoffend* or reincarcerat* or recidivi* or ex-offend* or jail or jails or incarcerat* or secure facilit* or convict* or revocation or inmate*) in ti,ab)
2. ((remand or prison* or offender* or criminal* or probation or court or courts or secure establishment*) in ti,ab)
3. ((drug dependenc* or drug addict* or narcotics abuse* or narcotics use* or narcotics misuse* or narcotics addict*) in ti,ab)

Table 7. SIGLE (Continued)

4. ((drug abuse* or drug misuse* or drug use*) in ti,ab
5. ((substance abuse* or substance misuse* or substance use*) in ti,ab
6. ((detox* or methadone maintenance or methadone prescri* or antagonist prescri* or dimorphine or naltrexone) in ti,ab
7. ((dependence disorder or drug involved) in ti,ab
8. ((amphetamine* abuse* or amphetamine* misuse* or amphetamine* use* or amphetamine* addict*) in ti,ab
9. ((cocaine abuse* or cocaine misuse* or cocaine use* or cocaine addict*) in ti,ab
10. ((crack abuse* or crack misuse* or crack use* or crack addict*) in ti,ab
11. ((heroin abuse* or heroin misuse* or heroin use* or heroin addict*) in ti,ab
12. ((chemical dependenc* or opiate abuse* or opiate misuse* or opiate use* or opiate addict*) in ti,ab
13. #1 or #2
14. #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12
15. #13 and #14

Table 8. Sociological Abstracts

Sociological Abstrac
1. remand in de
2. detention in de
3. prisoners in de
4. prisons in de
5. offenders in de
6. parole in de
7. probation in de
8. correctional system in de
9. courts in de
10. imprisonment in de

Table 8. Sociological Abstracts (Continued)

11. criminal justice in de
12. criminal proceedings in de
13. recidivism in de
14. jail in de
15. institutionalization (persons) in de
16. conviction/convictions in de
17. (remand or prison* or offender* or criminal* or probation or court or courts or secure establishment*) in ti,ab
18. (reoffend* or reincarcerat* or recidivi* or ex-offend* or jail or jails or incarcerat* or secure facilit* or convict* or revocation or inmate*) in ti,ab
19. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19
20. substance abuse in de
21. explode "Drug-Abuse" in DE
22. "Drug-Injection" in DE
23. explode "Narcotic-Drugs" in DE
24. "Cocaine-" in DE
25. "Addiction-" in DE
26. explode "Psychedelic-Drugs" in DE
27. (substance abuse* or substance misuse* or substance use*) in ti,ab
28. (drug abuse* or drug misuse* or drug use*) in ti,ab
29. (drug dependenc* or drug addict* or narcotics abuse* or narcotics use* or narcotics misuse* or narcotics addict*) in ti,ab
30. (chemical dependenc* or opiate abuse* or opiate misuse* or opiate use* or opiate addict*) in ti,ab
31. (heroin abuse* or heroin misuse* or heroin use* or heroin addict*) in ti,ab
32. (crack abuse* or crack misuse* or crack use* or crack addict*) in ti,ab
33. (cocaine abuse* or cocaine misuse* or cocaine use* or cocaine addict*) in ti,ab
34. (amphetamine* abuse* or amphetamine* misuse* or amphetamine* use* or amphetamine* addict*) in ti,ab

Table 8. Sociological Abstracts (Continued)

35. (dependence disorder or drug involved) in ti,ab
36. #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35
37. #19 and #36
38. "Detoxification-" in DE
39. "Methadone-Maintenance" in DE
40. "Counseling-" in DE
41. "Psychotherapy-" in DE
42. "Assertiveness-" in DE
43. (detoxification in de) or (methadone maintenance in de) or (treatment programs in de)
44. (counseling in de) or (psychotherapy in de) or (assertiveness in de) or (group therapy in de) or (goals in de) or (self control in de)
45. (interpersonal communication in de) or (social interaction in de) or (social competence in de) or (coping in de)
46. (social behavior in de) or (group work in de) or (lifestyle in de)
47. (after care in de) or (support networks in de) or (self help in de) or (self help groups in de) or (outreach programmes in de)
48. (outreach programs in de) or (referral in de) or (delinquency prevention in de) or (diversion/diversions in de)
49. (peer groups in de) or (peer influence in de) or (drug use screening in de) or (rehabilitation in de) or (work experience in de)
50. (detox* or methadone maintenance or methadone prescri* or antagonist prescri* or dimorphine or naltrexone) in ti,ab
51. (therapeutic communit* or motivational interview* or motivational enhance* or counseling or counselling or psychotherapy or cognitive behavi*) in ti,ab
52. (moral training or cognitive restructuring or assertiveness training or relaxation training) in ti,ab
53. (rational-emotive or rational emotive or family relationship therap* or community reinforcement or self monitoring or goal setting or self control training) in ti,ab
54. (self management or interpersonal skills or social skills or basic skills or relapse prevent* or prevent* relapse or craving reduc* or reduc* craving) in ti,ab
55. (trigger* or coping skills or anger management or group work or lifestyle modif* or high intensity training or resettlement or throughcare) in ti,ab

Table 8. Sociological Abstracts (Continued)

56. (aftercare or after care or brief solution or brief intervention* or 12 step* or twelve step* or minnesota program* or needle exchange or nes) in ti,ab
57. (syringe exchange or dual diagnosis or narcotics anonymous or self help or selfhelp or outreach or bail support) in ti,ab
58. (arrest referral* or diversion or dtto or dttos or drug treatment or carat or carats or counseling assessment or combined orders) in ti,ab
59. (drug-free or drug free or peer support or evaluation* or urinalysis or drug testing or drug use screen* or rehabilitation or discrete service* or discrete program*) in ti,ab
60. (residential program* or residential scheme* or residential service*) in ti,ab
61. (asro or addressing substance or pasro or prisons addressing or acupuncture or shock or boot camp*) in ti,ab
62. (work ethic or drug education or tasc or treatment accountability) in ti,ab
63. #38 or #39 #or #40 or #41 or #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62
64. #37 and #63

Table 9. ASSIA

ASSIA search
1. remand
2. prison or prisoner or prisoners
3. offender*
4. criminal*
5. probation
6. court or courts
7. tribunal or tribunals
8. secure establishment*
9. secure facilit*
10. reoffend*
11. reincarcerat*

Table 9. ASSIA (Continued)

12. recidivi*
13. ex-offender*
14. jail or jails
15. incarcerat*
16. convict or convicts
17. convicted
18. felon or felons
19. conviction*
20. reconviction*
21. high security
22. law enforcement
23. Substance abuse* or substance misuse* or substance use*
24. drug dependanc* or drug abuse* or drug use*
25. drug misuse* or drug addict*
26. narcotics addict* narcotics use* narcotics misuse* narcotics abuse*
27. chemical dependanc*
28. opiates
29. heroin
30. crack
31. cocaine
32. amphetamines
33. cocaine
34. addiction
35. dependence disorder*
36. drug involved

Table 9. ASSIA (Continued)

37. Substance-related disorders
38. amphetamine-related disorders
39. cocaine-related disorders
40. marijuana abuse
41. opioid-related disorders
42. street drugs
43. designer drugs
44. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22
45. 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43
46. 44 and 45

Table 10. HMIC

HMIC
1. remand in de
2. detention in de
3. prisoners in de
4. prisons in de
5. offenders in de
6. parole in de
7. probation in de
8. correctional system in de
9. courts in de
10. imprisonment in de
11. criminal justice in de
12. criminal proceedings in de

Table 10. HMIC (Continued)

13. recidivism in de
14. jail in de
15. institutionalization (persons) in de
16. conviction/convictions in de
17. (remand or prison* or offender* or criminal* or probation or court or courts or secure establishment*) in ti,ab
18. (reoffend* or reincarcerat* or recidivi* or ex-offend* or jail or jails or incarcerat* or secure facilit* or convict* or revocation or inmate*) in ti,ab
19. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18
20. substance abuse in de
21. explode "Drug-Abuse" in DE
22. "Drug-Injection" in DE
23. explode "Narcotic-Drugs" in DE
24. "Cocaine-" in DE
25. "Addiction-" in DE
26. explode "Psychedelic-Drugs" in DE
27. (substance abuse* or substance misuse* or substance use*) in ti,ab
28. (drug abuse* or drug misuse* or drug use*) in ti,ab
29. (drug dependenc* or drug addict* or narcotics abuse* or narcotics use* or narcotics misuse* or narcotics addict*) in ti,ab
30. (chemical dependenc* or opiate abuse* or opiate misuse* or opiate use* or opiate addict*) in ti,ab
31. (heroin abuse* or heroin misuse* or heroin use* or heroin addict*) in ti,ab
32. (crack abuse* or crack misuse* or crack use* or crack addict*) in ti,ab
33. (cocaine abuse* or cocaine misuse* or cocaine use* or cocaine addict*) in ti,ab
34. (amphetamine* abuse* or amphetamine* misuse* or amphetamine* use* or amphetamine* addict*) in ti,ab
35. (dependence disorder or drug involved) in ti,ab
36. #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35

Table 10. HMIC (Continued)

37. #19 and #36

Table 11. National Research Register

NRR search

1. REMAND

2. PRISON*

3. OFFENDER*

4. ((CRIMINAL* or PROBATION) or COURT) or COURTS)

5. (SECURE next ESTABLISHMENT*)

6. REOFFEND*

7. REINCARCERAT*

8. RECIDIV*

9. EXOFFEND*

10. ((JAIL or JAILS) or INCARCERAT*)

11. (SECURE next FACILIT*)

12. (((CONVICT* or REVOCATION) or INMATE*) OR (HIGH next SECURITY))

13. PRISONERS:ME

14. LAW-ENFORCEMENT:ME

15. JURISPRUDENCE:ME

16. CRIME:ME

17. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10

18. #11 or #12 or #13 or #14 or #15 or #16

19. #17 or #18

20. ((SUBSTANCE next ABUSE*) or (SUBSTANCE next MISUSE*)) OR (DRUG NEXT DEPENDENC*) OR (DRUG NEXT ABUSE*) OR (DRUG NEXT MISUSE*) OR (DRUG NEXT USE*) OR (DRUG NEXT ADDICTION))

Table 11. National Research Register (Continued)

21. ((NARCOTICS or (CHEMICAL next DEPENDENC*)) OR (OPIATE NEXT ADDICT*)) OR (OPIATE NEXT DEPENDENC*) OR (OPIATE NEXT ABUSE*) OR (OPIATE NEXT MISUSE*))
22. ((HEROIN next ADDICT*) or (HEROIN next DEPENDENC*)) OR (HEROIN NEXT MISUSE*) OR (HEROIN NEXT ABUSE*))
23. ((CRACK next ADDICT*) or (CRACK next DEPENDENC*)) OR (CRACK NEXT MISUSE*) OR (CRACK NEXT ABUSE*) OR (CRACK NEXT USE*))
24. ((COCAINE next ADDICT*) or (COCAINE next DEPENDENC*)) OR (COCAINE NEXT MISUSE*) OR (COCAINE NEXT ABUSE*) OR (COCAINE NEXT USE*))
25. ((AMPHETAMINE* next ADDICT*) or (AMPHETAMINE* next DEPENDENC*)) OR (AMPHETAMINE* NEXT MISUSE*) OR (AMPHETAMINE* NEXT ABUSE*) OR (AMPHETAMINE* NEXT USE*))
26. ((ADDICTS or (DEPENDENCE next DISORDER)) OR (DRUG NEXT INVOLVED))
27. (SUBSTANCE-RELATED and DISORDERS:ME)
28. SUBSTANCE-RELATED-DISORDERS:ME
29. AMPHETAMINE-ABUSE:ME
30. COCAINE-ABUSE:ME
31. MARIJUANA-ABUSE:ME
32. OPIOID-RELATED-DISORDERS:ME
33. PHENCYCLIDINE-ABUSE:ME
34. SUBSTANCE-ABUSE-INTRAVENOUS:ME
35. SUBSTANCE-WITHDRAWAL-SYNDROME:ME
36. (STREET next DRUGS)
38. STREET-DRUGS:ME
39. DESIGNER-DRUGS:ME
40. NARCOTICS:ME
41. (COCAINE:ME or AMPHETAMINES:ME)
42. ANALGESICS-ADDICTIVE:ME
43. ANALGESICS-OPIOID:ME

Table 11. National Research Register (Continued)

44. PSYCHOTROPIC-DRUGS:ME
45. #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 or #41 or #42 or #43 or #44
46. 19 and 45

Table 12. PAIS

PAIS
1. ((reoffend* or reincarcerat* or recidivi* or ex-offend* or jail or jails or incarcerat* or secure facilit* or convict* or revocation or inmate*) in ti,ab)
2. ((remand or prison* or offender* or criminal* or probation or court or courts or secure establishment*) in ti,ab)
3. ((drug dependenc* or drug addict* or narcotics abuse* or narcotics use* or narcotics misuse* or narcotics addict*) in ti,ab)
4. ((drug abuse* or drug misuse* or drug use*) in ti,ab) or ((substance abuse* or substance misuse* or substance use*) in ti,ab)
5. ((detox* or methadone maintenance or methadone prescri* or antagonist prescri* or dimorphine or naltrexone) in ti,ab)
6. ((dependence disorder or drug involved) in ti,ab)
7. ((amphetamine* abuse* or amphetamine* misuse* or amphetamine* use* or amphetamine* addict*) in ti,ab)
8. ((cocaine abuse* or cocaine misuse* or cocaine use* or cocaine addict*) in ti,ab)
9. ((crack abuse* or crack misuse* or crack use* or crack addict*) in ti,ab)
10. ((heroin abuse* or heroin misuse* or heroin use* or heroin addict*) in ti,ab)
11. ((chemical dependenc* or opiate abuse* or opiate misuse* or opiate use* or opiate addict*) in ti,ab)
12. ((moral training or cognitive restructuring or assertiveness training or relaxation training) in ti,ab)
13. ((therapeutic communit* or motivational interview* or motivational enhance* or counseling or counselling or psychotherapy or cognitive behavi*) in ti,ab)
14. ((work ethic or drug education or tasc or treatment accountability) in ti,ab)
15. ((asro or addressing substance or pasro or prisons addressing or acupuncture or shock or boot camp*) in ti,ab)
16. ((arrest referral* or diversion or dtto or dttos or drug treatment or carat or carats or counseling assessment or combined orders) in ti,ab)
17. ((residential program* or residential scheme* or residential service*) in ti,ab)

Table 12. PAIS (Continued)

18. ((syringe exchange or dual diagnosis or narcotics anonymous or self help or selfhelp or outreach or bail support) in ti,ab)
19. ((drug-free or drug free or peer support or evaluation* or urinalysis or drug testing or drug use screen* or rehabilitation or discrete service* or discrete program*) in ti,ab)
20. ((aftercare or after care or brief solution or brief intervention* or 12 step* or twelve step* or minnesota program* or needle exchange or nes) in ti,ab)
21. ((trigger* or coping skills or anger management or group work or lifestyle modif* or high intensity training or resettlement or throughcare) in ti,ab)
22. ((self management or interpersonal skills or social skills or basic skills or relapse prevent* or prevent* relapse or craving reduc* or reduc* craving) in ti,ab)
24. ((rational-emotive or rational emotive or family relationship therap* or community reinforcement or self monitoring or goal setting or self control training) in ti,ab)
25. #1 or #2
26. #3 or #4 or #5 or #6 or #7 or #8 or 9 or #10 or #11
27. #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24
28. 25 and #26 and #27

Table 13. Criminal Justice Abstracts

CJA search
1. (substance abuse* or substance misuse* or substance use or substance users) in ti,ab,de
2. substance related in ti,ab,de
3. drug related in ti,ab,de
4. (drug dependenc* or drug abuse* or drug misuse* or drug use or drug users or drug addiction) in ti,ab,de
5. (narcotics use or narcotics users or narcotics abuse* or narcotics misuse* or chemical dependenc*) in ti,ab,de
6. (opiates or heroin or crack or cocaine or amphetamines or addict or addicts or addicted or dependence disorder* or drug involved) in ti,ab,de
7. (designer drugs or street drugs or polydrug misuse* or polydrug abuse*) in ti,ab,de
8. #1 or #2 or #3 or #4 or #5 or #6 or #7
9. ((antagonist near prescri*) or diamorphine or naltrexone) in ti,ab,de

Table 13. Criminal Justice Abstracts (Continued)

10(therapeutic communit* or (motivational near interview*)) in ti,ab,de
11. (motivational near enhancement) in ti,ab,de
12. (counselling or counseling) in ti,ab,de
13. (psychotherap* or cognitive behav* or behav* therap* or (moral near training)) in ti,ab,de
14. (cognitive restructuring or (assertiveness near train*) or relaxation training) in ti,ab,de
15. (rational emotive or family relationship therap*) in ti,ab,de
16. (community reinforcement or self monitoring or goal setting or goalsetting) in ti,ab,de
17. (self control near training) in ti,ab,de
18. (self management) in ti,ab,de
19. (interpersonal skills near training) in ti,ab,de
20. ((social skills or basic skills) near training) in ti,ab,de
21. ((relapse near prevent*) or (craving near reduc*)) in ti,ab,de
22. (trigger* or coping skills or anger management or group work or (lifestyle near modif*)) in ti,ab,de
23. (high intensity training or resettlement or throughcare or aftercare or after care) in ti,ab,de
24. (brief solution* or brief intervention*) in ti,ab,de
25. (minnesota in ti,ab) in ti,ab,de
26. (12 step* or twelve step*) in ti,ab,de
27. (needle exchange or nes or syringe exchange) in ti,ab,de
28. (dual diagnosis or narcotics anonymous or self help or selfhelp or outreach) in ti,ab,de
29. (bail support or bail program* or arrest referral* or diversion or dtto* or drug treatment) in ti,ab,de
30. (carat or counselling assessment or counseling assessment) in ti,ab,de
31. (combined order* or drug free wing* or drug free environment* or peer support) in ti,ab,de
32. (user evaluations or urinalys* or urinalys* or drug test* or rehab* or discrete service*) in ti,ab,de

Table 13. Criminal Justice Abstracts (Continued)

33. (discrete program* or residential program* or residential scheme*) in ti,ab,de
34. (asro or addressing substance*) in ti,ab,de
35. (pasro or prisons addressing) in ti,ab,de
36. (acupuncture or shock or boot camp or boot camps or work ethic camp*) in ti,ab,de
37. (drug education or tasc or treatment accountability) in ti,ab,de
38. (detoxification or detox or methadone maintenance or (methadone near prescri*)) in ti,ab,de
39. #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29
40. #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39
41. #39 or #40
42. #8 and #41
9. #42 and (PY > "1979")

WHAT'S NEW

Last assessed as up-to-date: 18 May 2006.

Date	Event	Description
25 March 2008	Amended	Converted to new review format.

HISTORY

Protocol first published: Issue 2, 2005

Review first published: Issue 3, 2006

Date	Event	Description
19 May 2006	New citation required and conclusions have changed	Substantive amendment

CONTRIBUTIONS OF AUTHORS

Two independent reviewers inspected the search hits by reading the titles and abstracts. Each potentially relevant study located in the search was obtained as a full article and independently assessed for inclusion by two reviewers. In the case of discordance, a third independent reviewer arbitrated. Where it was not possible to evaluate the study because of language problems or missing information the studies were classified as 'translation/information required to determine decision' until a translation or further details was provided.

DECLARATIONS OF INTEREST

None

SOURCES OF SUPPORT

Internal sources

- No sources of support supplied

External sources

- Department of Health, UK.

INDEX TERMS

Medical Subject Headings (MeSH)

*Law Enforcement; *Therapeutic Community; Aftercare; Crime [*prevention & control]; Substance-Related Disorders [*rehabilitation]

MeSH check words

Humans