Program factors related to women's substance abuse treatment retention and other outcomes: a review and critique

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CRD summary
This review examined factors related to successful outcomes in the treatment of substance-abusing women. The author concluded that the limited evidence suggested elements that improve outcomes, but further research is required to confirm the findings. There were various potential sources of bias in the review process but, overall, the conclusions appear reasonable.

Authors' objectives
To determine the factors related to retention and other successful outcomes in the treatment of women's substance abuse.

Searching
PubMed, Social Work Abstracts, Sociological Abstracts, Social Services Abstracts, PsycINFO and ERIC were searched. The reference lists of articles were also screened. The search terms and dates searched were not reported, and it was not stated whether any language limitations were applied.

Study selection
Study designs of evaluations included in the review
Qualitative and quantitative studies were eligible for inclusion.

Specific interventions included in the review
It was clear that the review focused on interventions for substance abuse. The included studies used single- and mixed-sex programmes, residential treatment, intensive out-patient or day treatment, traditional out-patient treatment, treatment that included child care, case management, 'one-stop shopping' models of treatment, supportive staff and group and individual counselling.

Participants included in the review
It was clear that the review focused on women with substance abuse. Studies that only included women, or in which women were analysed separately, were eligible for inclusion.

Outcomes assessed in the review
Studies that assessed treatment outcomes (e.g. use of alcohol and other drugs, employment-related outcomes, emotional status and criminal behaviour) and/or retention were eligible for inclusion. The included studies assessed treatment outcomes using a variety of measures (details were reported).

How were decisions on the relevance of primary studies made?
The author did not state how the papers were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
Studies were assessed for: randomisation; type of control condition; ability to control for the effect of multiple cointerventions, standard definition of treatment factors and outcomes; sample size; description of programme; and statistical analyses.

The author did not state who performed the validity assessment.
Data extraction
The author did not state how the data were extracted for the review, or how many reviewers performed the data extraction. Results data were extracted for each study.

Methods of synthesis
How were the studies combined?
The studies were grouped as follows using content analysis methods and combined in a narrative: single- versus mixed-sex programmes; residential versus intensive out-patient or day treatment versus traditional out-patient treatment; provision of child care versus no provision; case management and/or a 'one-stop shopping' model; and supportive staff and provision for individual counselling.

How were differences between studies investigated?
Differences between the studies were discussed in the paper.

Results of the review
Thirty-five studies (n about 19,035) were included. There were 8 randomised controlled trials (n=1,435), 15 non-randomised studies with control groups (n=16,096), 6 one-group studies without a control group (n at least 1,191; one study did not report sample size) and 6 reports of qualitative studies (n about 313, although one sample of n=90 seems to have been reported in two separate papers). One non-randomised, three-group study was mentioned in a footnote, but not included in the review because the authors concluded that all three treatments were ineffective.

Methodological flaws within the studies included: lack of a randomised controlled design; no separation of effects of multiple co-interventions; lack of standardised outcome measures and durations of follow-up; small sample size; lack of adequate description of the intervention; and lack of complete statistical analysis.

Single- versus mixed-sex programmes: 9 quantitative and 3 qualitative studies were found. Six of the quantitative studies suggested that treatment outcomes or retention were better with women only programmes; the other 3 quantitative studies suggested that there were no differences between single- and mixed-sex programmes for treatment outcomes.

Residential versus intensive out-patient or day treatment versus traditional out-patient treatment: 4 quantitative studies and 1 qualitative study were found. The quantitative studies reported that residential treatments improved treatment outcomes (2 studies reported reduced criminal activity and improved employment rates, and one reported improved abstinence) and improved retention (2 studies) more than less intensive care.

Treatment intensity: 4 quantitative studies were found. Three studies reported little difference in drop-out rates between regular and intensive out-patient programmes or between regular, intensive and residential care in the first 3 months, but reported increased retention after 3 months with more intensive care. The other study found intensive out-patient treatment significantly increased retention compared with less intensive treatment. Only one of the studies reported improved treatment outcomes.

Provision of child care versus no provision: 4 quantitative and 2 qualitative studies were found. All 4 quantitative studies reported that mothers permitted to keep children during residential care stayed longer or were more likely to complete treatment than mothers who did not have their child with them.

Case management and/or 'one-stop shopping’ model: 6 quantitative studies and 1 qualitative study were found. Five of the 7 studies reported that case management improved retention or treatment outcomes; findings from the other 2 studies were inconsistent. Both studies using a 'one-stop shopping’ model reported increased retention and treatment outcomes.

Supportive staff and provision for individual counselling: 2 quantitative and 3 qualitative studies were found. All 5 studies reported that support from staff and/or the offer of individual counselling improved treatment outcomes.
Authors' conclusions
Findings suggested that single-sex programmes, residential programmes with increased intensity, child care provision, case management and 'one-stop shopping', and supportive staff plus the offer of individual counselling are effective programme elements. However, the studies had methodological weaknesses and further research is required to confirm these findings.

CRD commentary
The review question was clear in terms of the study design, participants and outcomes; inclusion criteria for the study design and outcomes were broad, whilst those for the interventions were not explicitly defined. In a footnote, the review author mentioned one study that was not included in the review since the study author had concluded that all treatments were ineffective; this highlights potential selection bias. Six databases were searched but the search strategy was not described in full, thus it was not possible to assess the appropriateness of the methods used. It was not clear whether any language limitations had been applied and so the potential for language bias could not be assessed. No attempts were made to locate unpublished studies, thereby raising the possibility of publication bias; the author acknowledged this possibility. The methods used to select studies, assess validity and extract the data were not described, so it is not known whether any efforts were made to reduce reviewer errors and bias. Validity was assessed using specified criteria and the results of the validity assessment were discussed.

The narrative synthesis was appropriate given the diversity of the studies. Study validity was taken into account when considering the results, although some clear differentiation of results according to study quality might have provided greater clarity on the strength of the evidence. In addition, several studies assessed multiple outcome measures; this increased the likelihood of at least one positive finding, but this possibility was not highlighted. Potential reasons for differences between the studies were discussed. Various potential sources of bias in the review process mean that it is difficult to assess the reliability of the author's conclusions. However, overall, the conclusions appear reasonable and the need for further research appears supported.

Implications of the review for practice and research
Practice: The author stated that policy-makers should make women-only substance abuse programmes (or, failing that, women-only groups) more available and consider providing child care and other on-site services or case management with community services. They also stated that administrators and care providers should be nonjudgmental and nonconfrontational and provide individual as well as group counselling.

Research: The author stated that further well-conducted research is required. In particular, the author stated that future studies should present complete statistical analyses; separate out the effects of cointerventions; assess the effects of different types and styles of counselling; seek to determine the characteristics of women most likely to benefit from residential programmes; examine the effects of child-care provision; and assess a wider range of standardised outcomes (such as the use of alcohol and other drugs, employment, child custody and criminal behaviour) and assess outcomes at similar times of follow-up using better study designs.

Bibliographic details

PubMedID
16377448

DOI

Indexing Status
Subject indexing assigned by NLM
MeSH
Female; Humans; Program Development; Psychology; Retention (Psychology); Substance-Related Disorders /therapy; Treatment Outcome

AccessionNumber
12006000376

Date bibliographic record published
31/01/2007

Date abstract record published
31/01/2007

Record Status
This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.