**Psychosocial interventions for people with both severe mental illness and substance misuse**

*Hunt Glenn E, Siegfried Nandi, Morley Kirsten, Sibarthan Thiagarajan, Cleary Michelle*

**Authors’ objectives**

**Background:** Even low levels of substance misuse by people with a severe mental illness can have detrimental effects. Objectives: To assess the effects of psychosocial interventions for reduction in substance use in people with a serious mental illness compared with standard care.

**Search methods:** For this update (2013), the Trials Search Co-ordinator of the Cochrane Schizophrenia Group (CSG) searched the CSG Trials Register (July 2012), which is based on regular searches of major medical and scientific databases. The principal authors conducted two further searches (8 October 2012 and 15 January 2013) of the Cochrane Database of Systematic Reviews, MEDLINE and PsycINFO. A separate search for trials of contingency management was completed as this was an additional intervention category for this update.

**Selection criteria:** We included all randomised controlled trials (RCTs) comparing psychosocial interventions for substance misuse with standard care in people with serious mental illness.

**Data collection and analysis:** We independently selected studies, extracted data and appraised study quality. For binary outcomes, we calculated standard estimates of relative risk (RR) and their 95% confidence intervals (CI) on an intention-to-treat basis. For continuous outcomes, we calculated the mean difference (MD) between groups. For all meta-analyses we pooled data using a random-effects model. Using the GRADE approach, we identified seven patient-centred outcomes and assessed the quality of evidence for these within each comparison.

**Main results:** We included 32 trials with a total of 3165 participants. Evaluation of long-term integrated care included four RCTs (n = 735). We found no significant differences on loss to treatment (n = 603, 3 RCTs, RR 1.09 CI 0.82 to 1.45, low quality of evidence), death by 3 years (n = 421, 2 RCTs, RR 1.18 CI 0.39 to 3.57, low quality of evidence), alcohol use (not in remission at 36 months) (n = 143, 1 RCT, RR 1.15 CI 0.84 to 1.56, low quality of evidence), substance use (n = 85, 1 RCT, RR 0.89 CI 0.63 to 1.25, low quality of evidence), global assessment of functioning (n = 171, 1 RCT, MD 0.7 CI 2.07 to 3.47, low quality of evidence), or general life satisfaction (n = 372, 2 RCTs, MD 0.02 higher CI 0.28 to 0.32, moderate quality of evidence).

For evaluation of non-integrated intensive case management with usual treatment (4 RCTs, n = 163) we found no statistically significant difference for loss to treatment at 12 months (n = 134, 3 RCTs, RR 1.21 CI 0.73 to 1.99, very low quality of evidence). Motivational interviewing plus cognitive behavioural therapy compared to usual treatment (7 RCTs, total n = 878) did not reveal any advantage for retaining participants at 12 months (n = 327, 1 RCT, RR 0.99 CI 0.62 to 1.59, low quality of evidence) or for death (n = 493, 3 RCTs, RR 0.72 CI 0.22 to 2.41, low quality of evidence), and no benefit for reducing substance use (n = 119, 1 RCT, MD 0.19 CI -0.22 to 0.6, low quality of evidence), relapse (n = 36, 1 RCT, RR 0.5 CI 0.24 to 1.04, very low quality of evidence) or global functioning (n = 445, 4 RCTs, MD 1.24 CI 0.32 to 4.34, low quality of evidence). Cognitive behavioural therapy alone compared with usual treatment (2 RCTs, n = 152) showed no significant difference for losses from treatment at 3 months (n = 152, 2 RCTs, RR 1.12 CI 0.44 to 2.86, low quality of evidence). No benefits were observed on measures of lessening cannabis use at 6 months (n = 47, 1 RCT, RR 1.30 CI 0.79 to 2.15, very low quality of evidence) or mental state (n = 105, 1 RCT, Brief Psychiatric Rating Scale MD 0.52 CI -0.78 to 1.82, low quality of evidence). We found no advantage for motivational interviewing alone compared with usual treatment (8 RCTs, n = 509) in reducing losses to treatment at 6 months (n = 62, 1 RCT, RR 1.71 CI 0.63 to 4.64, very low quality of evidence), although significantly more participants in the motivational interviewing group reported for their first aftercare appointment (n = 93, 1 RCT, RR 0.69 CI 0.53 to 0.9). Some differences, favouring treatment, were observed in abstaining from alcohol (n = 28, 1 RCT, RR 0.36 CI 0.17 to 0.75, very low quality of evidence) but not other substances (n = 89, 1 RCT, RR -0.07 CI -0.56 to 0.42, very low quality of evidence), and no differences were observed in mental state (n = 30, 1 RCT, MD 0.19 CI -0.59 to 0.21, very low quality of evidence). We found no significant differences for skills training in the numbers lost to treatment by 12 months (n = 94, 2 RCTs, RR 0.70 CI 0.44 to 1.1, very low quality of evidence). We found no differences for contingency management compared with usual treatment (2 RCTs, n = 206) in numbers lost to treatment at 3 months (n = 176, 1 RCT, RR 1.65 CI 1.18 to 2.31, low quality of evidence), number of stimulant positive urine tests at 6 months (n = 176, 1 RCT, RR 0.83 CI 0.65 to 1.06, low quality of evidence) or hospitalisations (n = 176, 1 RCT, RR 0.21 CI 0.05 to 0.93, low quality of evidence). We were unable to summarise all findings due to skewed data or because trials did not measure the outcome of interest. In general, evidence was rated as low or very low due to high or unclear risks of bias because of poor trial methods, or poorly reported methods, and imprecision due to small sample sizes, low event rates and wide confidence intervals.

**Authors’ conclusions:** We included 32 RCTs and found no compelling evidence to support any one psychosocial treatment over another for people to remain in treatment or to
reduce substance use or improve mental state in people with serious mental illnesses. Furthermore, methodological
difficulties exist which hinder pooling and interpreting results. Further high quality trials are required which address
these concerns and improve the evidence in this important area.

Bibliographic details
Hunt Glenn E, Siegfried Nandi, Morley Kirsten, Sitharthan Thiagarajan, Cleary Michelle. Psychosocial interventions
for people with both severe mental illness and substance misuse. Cochrane Database of Systematic Reviews: Reviews
2013; Issue 10

AccessionNumber
10000001088

Date abstract record published
13/07/2012

Record Status
This is an abstract for a Cochrane review