Best Evidence Summaries of Topics in Mental Healthcare

BEST *in* MH *clinical question-answering service*

Question

"In people with a diagnosis of antisocial / dissocial personality disorder, what is the most effective psychological intervention (including possible community treatment methods) for reducing emotional instability, risk, and offending?"

Clarification of question using PICO structure (PICTRO for diagnostic questions)

Patients:	People with a diagnosis of antisocial / dissocial personality
Intervention:	Any psychological intervention
Comparator:	Any other psychological intervention
Outcome:	Emotional instability, risk, and offending

Clinical and research implications

No definite clinical implications can be made from the available evidence. The authors of a systematic review (SR) stated that professionals will therefore have to rely on their clinical experience, but recognise that good quality evidence supporting whatever intervention is chosen is virtually non-existent. They also stated that because it may be difficult to retain people with anti-social personality disorder (ASPD) and substance misuse in a treatment programme, contingency management may be useful. The authors of a randomised controlled trial (RCT) stated that for clients with a serious mental illness and a substance use disorder, integrated treatment such as assertive community treatment or standard clinical case management, should be provided by whatever route can be implemented and sustained.

There was consensus among the included studies that further research is needed in to clarify which psychological treatments are effective for people with ASPD. The authors of the SR acknowledged the difficulty in retaining this population group in a trial. They recommended that treatments be assessed in individuals incarcerated, and evaluate reconviction after release from prison as a primary outcome. The authors of a RCT stated that future studies should further examine the effectiveness of different types of case management interventions and explore how the effectiveness of these approaches may vary for clients with different characteristics—for example, type and extent of substance use, mental health diagnosis, and stage of readiness for treatment.

What does the evidence say?

Number of included studies/reviews (number of participants)
One SR (data were presented for 5 RCTs with a total of 276 participants) (Gibbon et al. 2010), one RCT (n=198) (Essock et al. 2006), and a later publication with subgroup analysis of data from this RCT (n=124) (Frisman et al. 2009) met the inclusion criteria for this BEST summary.

Main Findings
The authors of the SR reported significant reductions in drug misuse for outpatients with cocaine dependence for the following treatment groups (when compared to standard maintenance alone): contingency management plus standard maintenance (17 weeks: OR 8.56, 95% CI 1.33 to 54.95, 1 RCT, n=24, 26 weeks: OR 11.67, 95% CI 1.533 to 89.12, 1 RCT, n=22, and 52 weeks: OR 10.00, 95% CI 1.44 to 69.26, 1 RCT, n=24), CBT plus standard maintenance (52 weeks only: OR 8.00, 95% CI 1.13 to 56.79, 1 RCT, n=22), and contingency management plus CBT plus standard maintenance (52 weeks only: OR 16.00, 95% CI 1.09 to 234.25, 1 RCT, n=15). CBT plus treatment as usual was not superior for male outpatients with recent verbal/physical violence. A multi-component intervention utilising motivational interviewing principles, the 'Driving Whilst Intoxicated program', plus incarceration did not have an effect on re-arrest rates compared with incarceration only, but did have a positive effect on number of drinking days and on total standard ethyl-alcohol consumption units in prisoners sentenced for driving whilst intoxicated at 24 months ($p<0.05$).

A RCT conducted in the US compared assertive community treatment (ACT) with standard clinical case management (SCCM) in homeless or unstably housed clients with co-occurring major psychotic disorder and active substance use disorders (Esscock et al. 2006). After 3 years, no significant differences between treatment groups were observed for substance use, severity of psychiatric symptoms, or general life satisfaction, however, improvements in *both* treatment groups were

observed for all of these domains. There was no significant change in global functioning over the course of the study in either group. Subgroup analysis demonstrated that in one community mental health centre that had a relatively higher rate of institutionalization than another, participants who received ACT were less likely to be institutionalized and spent fewer days institutionalized over the course of the three-year follow up.

Further subgroup analysis of this RCT data was conducted to assess the effectiveness of ACT compared with SCCM in participants with ASPD compared to those without ASPD (Frisman et al. 2009). The authors reported that participants with ASPD assigned to ACT showed a significantly greater reduction in alcohol use (p=0.04) and were less likely to go to jail (p=0.05) than those who received SCCM. Participants without ASPD did not differ between the two interventions. There were no significant differences for other substance use or criminal justice outcomes.

Authors Conclusions

The authors of the SR concluded that there was insufficient trial evidence to justify using any psychological intervention for adults with ASPD. They also stated that there was some evidence that contingency management could help reduce substance misuse.

The authors of the RCT concluded that both ACT and SCCM can be used to treat individuals with co-occurring major psychotic disorder and active substance use disorders. The authors also concluded that administrators in systems with low rates of institutionalization may have a greater positive effect on clients' lives by implementing integrated treatment for individuals with co-occurring disorders rather than implementing assertive community treatment teams, if neither form of treatment is already in place.

Reliability of conclusions/Strength of evidence

The SR was well conducted and given the small number of poor quality studies included in the review, the cautious conclusions are appropriate and likely to be reliable. The RCT was also generally well-conducted, but any results/conclusions derived from subgroup analysis should be treated as exploratory.

What do guidelines say?

None available.

Date question received: 11/05/2012
Date searches conducted: 17/05/2012
Date answer completed: 28/05/2012

References

Systematic Reviews

1. Gibbon S,Duggan C, Stoffers J,Huband N, VöllmBA, FerriterM, Lieb K. Psychological interventions for antisocial personality disorder. *CochraneDatabase of Systematic Reviews* 2010, Issue 6. Art.No.:CD007668.DOI: 10.1002/14651858.CD007668.pub2. (http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD007668.pub2/pdf)

2. Essock S, Mueser K, Drake R, Covell N, McHugo G, Frisman L, Kontos N, Jackson C, Townsend F, Swain K Comparison of ACT and Standard Case Management for Delivering Integrated Treatment for Co-occurring Disorders *ps.psychiatryonline.org, February 2006 Vol. 57 No. 2*
3. Frisman L, Mueser K, Covell N, Lin H, Crocker A, Drake R, Essock S. Use of Integrated Dual Disorder Treatment Via Assertive Community Treatment Versus Clinical Case Management for Persons With Co-Occurring Disorders and Antisocial Personality Disorder. *The Journal of Nervous and Mental Disease, November 2009, Vol 197:11.*

Guidelines

National Institute for Health and Clinical Excellence (2010) National Practice Clinical Guideline Number 77. Antisocial Personality Disorder: Treatment Management and Prevention. (http://www.nice.org.uk/nicemedia/live/11765/43046/43046.pdf)

Results

Systematic Reviews

Author (year)	Search Date	Inclusion criteria	Number of included studies	Summary of results	Risk of bias
Gibbon et al. (2010)	Sept 2009	Only prospective randomised controlled trials were included in this review, with or without blinding. The participants of the trial were adults with a diagnosis of antisocial or dissocial personality disorder, defined by any operational criteria. The review included studies that examined any psychological intervention, compared with any other psychological intervention. The inclusion criteria required that a control group was present. Primary outcomes of interest were in relation to aggression, reconviction, global state/functioning, social functioning and adverse events. Secondary outcomes of interest were in relation to quality of life, engagement with services, satisfaction with treatment, leaving the study early, and substance misuse.	5 RCTs (n = 276)	**Contingency management + standard maintenance versus standard maintenance alone** There was a significant effect in favour of the treatment group for social functioning: mean family/social domain scores at 6 months (MD -0.08, 95% CI -0.14 to -0.02, 1 RCT, n=83); substance misuse (drugs): numbers with cocaine-negative specimens at 17 weeks (OR 8.56, 95% CI 1.33 to 54.95, 1 RCT, n=24), 26 weeks (OR 11.67, 95% CI 1.533 to 89.12, 1 RCT, n=22) and 52 weeks (OR 10.00, 95% CI 1.44 to 69.26, 1 RCT, n=24). **Cognitive behavioural therapy plus treatment as usual (TAU) vs. TAU** There was no significant difference between treatment groups for verbal or physical aggression, social functioning, anger, substance abuse (alcohol), BCSS self-assessed positive or negative belief scores, anxiety or depression at 12 months. **Social problem-solving therapy with psychoeducation vs. TAU**	Low – but the authors' interpretation of results from the data presented was not always clear

				At 6 months, there was no significant difference between treatment groups for mean social functioning scores, mean social functioning scores, mean anger expression index scores, mean impulsiveness scores, mean overall shame scores, or mean dissociation scores. **CBT plus standard maintenance vs. standard maintenance alone** There was no significant difference between treatment groups for substance misuse (drugs): numbers with cocaine-negative specimens at 17 or 26 weeks, but there was a significant effect in favour of treatment at 52 weeks: (OR 8.00, 95% CI 1.13 to 56.79, 1 RCT, n=22). **Contingency management plus CBT plus standard maintenance vs. standard maintenance alone** There was no significant difference between treatment groups for substance misuse (drugs): numbers with cocaine-negative specimens at 17 or 26 weeks, but there was a significant effect in favour of treatment at 52 weeks: (OR 16.00, 95% CI 1.09 to 234.25, 1 RCT, n=15). **'Driving Whilst Intoxicated Program' plus incarceration vs. incarceration alone** There was no significant difference between treatment groups for the outcome:	

				reconviction for drink-driving. There was a statistically significant difference between treatment and control conditions (group x AsPD x time interaction) over the 24-month period for total standard methyl-alcohol consumption units, and number of drinking days, favouring treatment in each case (P < 0.05). A similar analysis for average blood alcohol content did not indicate statistically significant differences (P=0.052). The authors stated that the overall quality of the evidence from these trials was relatively poor.	

RCTs

Author (year)	**Inclusion criteria**	**Number of participants**	**Summary of results**	**Risk of bias**
Essock et al. (2006)	*Population*: US homeless or unstably housed clients with co-occurring major psychotic disorder and active substance use disorders who had high service use in the past 2 years *Intervention*: Assertive community treatment *Comparator*: Standard clinical case management *Outcome:* Substance use, residential status, severity of psychiatric symptoms or general life satisfaction, global functioning.	N=198 (99 in each treatment arm) (results available for 179; unclear if ITT performed)	After 3 years, no significant differences between treatment groups were observed for substance use, severity of psychiatric symptoms, or general life satisfaction; improvements in both treatment groups were observed for all of these domains. There was no significant change in global functioning over the course of the study. Data were also compared between the two treatments at two different urban sites. The following main results were reported: At one site, the standard clinical case management group averaged significantly more days in the hospital (mean 41±60 vs. 32±91, p=0.002) and significantly more days institutionalized	Low, but some attrition

			(hospitalized or incarcerated) (158±254 vs. 139±262, p=0.02) than the assertive community treatment group. No significant differences were observed at the other site.	
Frisman (2009)	Results were drawn from a longitudinal RCT comparing assertive community treatment (ACT) with Standard Clinical Case Management (SCCM) in the delivery of integrated dual disorder treatment (IDDT) (Essock et al 2006). This analysis examined the participants within the original trial with the diagnosis of antisocial personality disorder (ASPD) compared to a group without the disorder, in terms of those who received ACT compared to those that received SCCM. Primary outcomes were reduction in alcohol use and likelihood of conviction.	N=124 (36 with a diagnosis of antisocial personality disorder & 88 without the diagnosis)	The authors reported that participants with ASPD assigned to ACT showed a significantly greater reduction in alcohol use (p=0.04) and were less likely to go to jail (p=0.05) than those who received SCCM. Participants without ASPD did not differ between the two interventions. There were no significant differences for other substance use or criminal justice outcomes.	High – subgroup analysis of data from Essock et al. (2006) – exploratory data

Risk of Bias:

Systematic Reviews

Author (year)	Risk of Bias				
	Inclusion criteria	Searches	Review Process	Quality assessment	Synthesis
Gibbon et al. (2010)	☺	☺	☺	☺	?

RCTs

Study	RISK OF BIAS					
	Random allocation	Allocation concealment	Blinding of participants and personnel	Blinding of outcome assessment	Incomplete outcome data	Selective Reporting
Essock (2006)	☺	☺	☺	☺	☹	?
Frisman (2009)	Not applicable – subgroup analysis of data from Essock (2006)					

☺Low Risk ☹High Risk ? Unclear Risk

Search Details

Source	Search Strategy	Number of hits	Relevant evidence identified
SRs and Guidelines			
NICE	(antisocial OR dissocial) adj2 (personality adj2 disorder*)	9	1
DARE	1 MeSH DESCRIPTOR Antisocial Personality Disorder EXPLODE ALL TREES 8 Delete 2 MeSH DESCRIPTOR Personality Disorders EXPLODE ALL TREES 54 Delete 3 ((antisocial OR (anti adj3 social) or anti-social) adj4 personal*) 16 Delete 4 (dissocial) 0 Delete 5 (aspd) 3 Delete 6 #1 OR #2 OR #3 OR #4 OR #5 62 Delete	62	1
Primary studies			
CENTRAL	#1 (nonepileptic):ti,ab,kw or (non-epileptic):ti,ab,kw or ("non epileptic"):ti,ab,kw or (dissociative):ti,ab,kw or (psychogenic):ti,ab,kw 607 edit delete #2 (seizures):ti,ab,kw or (fits):ti,ab,kw or (attacks):ti,ab,kw 12184 edit delete #3 (pseudoseizure*):ti,ab,kw or (PNES):ti,ab,kw or (NES):ti,ab,kw 45 edit delete #4 (#1 AND #2) 29 edit delete #5 (#3 OR #4) 68 edit delete #6 (#5), from 2005 to 2012 31 edit delete	28	
PsycINFO	1. PsycINFO; non-epileptic.ti,ab; 331 results. 2. PsycINFO; nonepileptic.ti,ab; 636 results. 3. PsycINFO; "non epileptic".ti,ab; 331 results. 4. PsycINFO; psychogenic.ti,ab; 4387 results. 5. PsycINFO; dissociative.ti,ab; 4918 results. 6. PsycINFO; 1 OR 2 OR 3 OR 4 OR 5; 9738 results. 7. PsycINFO; (6 adj3 seizure*).ti,ab; 187 results. 8. PsycINFO; CLINICAL TRIALS/; 6016 results. 9. PsycINFO; random*.ti,ab; 108705 results. 10. PsycINFO; groups*.ti,ab; 323490 results. 11. PsycINFO; (doubl* adj3 blind*).ti,ab; 16279 results.	40	

	12. PsycINFO; (singl* adj3 blind*).ti,ab; 1339 results. 13. PsycINFO; EXPERIMENTAL DESIGN/; 8214 results. 14. PsycINFO; controlled.ti,ab; 67972 results. 15. PsycINFO; (clinical adj3 study).ti,ab; 6773 results. 16. PsycINFO; trial.ti,ab; 57237 results. 17. PsycINFO; "treatment outcome clinical trial".md; 21794 results. 18. PsycINFO; 8 OR 9 OR 10 OR 11 OR 12 OR 13 OR 14 OR 15 OR 16 OR 17; 496443 results. 19. PsycINFO; 7 AND 18; 53 results. 20. PsycINFO; 7 [Limit to: Publication Year 2005-2012]; 117 results. 21. PsycINFO; 19 [Limit to: Publication Year 2005-2012]; 40 results.		
MEDLINE	99. MEDLINE; (nonepileptic adj3 seizure*).ti,ab; 415 results. 100. MEDLINE; ("non epileptic" adj3 seizure*).ti,ab; 275 results. 101. MEDLINE; ("non-epileptic" adj3 seizure*).ti,ab; 275 results. 102. MEDLINE; ("psychogenic" adj3 seizure*).ti,ab; 525 results. 103. MEDLINE; ("dissociative" adj3 seizure*).ti,ab; 19 results. 104. MEDLINE; 99 OR 100 OR 101 OR 102 OR 103; 853 results. 105. MEDLINE; pseudoseizure.ti,ab; 65 results. 106. MEDLINE; 104 OR 105; 910 results. 109. MEDLINE; "randomized controlled trial".pt; 327424 results. 110. MEDLINE; "controlled clinical trial".pt; 84102 results. 111. MEDLINE; randomi?ed.ab; 290776 results. 112. MEDLINE; placebo.ab; 135952 results. 113. MEDLINE; "drug therapy".fs; 1530686 results. 114. MEDLINE; randomly.ab; 178278 results. 115. MEDLINE; trial.ab; 251477 results. 116. MEDLINE; groups.ab; 1164070 results. 117. MEDLINE; 109 OR 110 OR 111 OR 112 OR 113 OR 114 OR 115 OR 116; 2938382 results. 118. MEDLINE; 106 AND 117; 263 results. 119. MEDLINE; 118 [Limit to: Publication Year 2005-2012]; 130 results.	130	
EMBASE	29. EMBASE; random*.tw; 722076 results. 30. EMBASE; factorial*.tw; 18697 results. 31. EMBASE; placebo*.tw; 173569 results.	74	

	32. EMBASE; (crossover* OR cross-over*).tw; 60681 results. 33. EMBASE; (doubl* adj3 blind*).tw; 127267 results. 34. EMBASE; (singl* adj3 blind*).tw; 13948 results. 35. EMBASE; assign*.tw; 201557 results. 36. EMBASE; allocat*.tw; 67476 results. 37. EMBASE; volunteer*.tw; 155036 results. 38. EMBASE; CROSSOVER PROCEDURE/; 33755 results. 39. EMBASE; DOUBLE-BLIND PROCEDURE/; 108636 results. 40. EMBASE; SINGLE-BLIND PROCEDURE/; 15834 results. 41. EMBASE; RANDOMIZED CONTROLLED TRIAL/; 321249 results. 42. EMBASE; 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; 1192918 results. 43. EMBASE; 28 AND 42; 116 results. 44. EMBASE; 43 [Limit to: Publication Year 2005-2012]; 83 results. 45. EMBASE; (nonepileptic adj3 seizure*).ti,ab; 584 results. 46. EMBASE; ("non epileptic" adj3 seizure*).ti,ab; 443 results. 47. EMBASE; ("non-epileptic" adj3 seizure*).ti,ab; 443 results. 48. EMBASE; ("psychogenic" adj3 seizure*).ti,ab; 759 results. 49. EMBASE; ("dissociative" adj3 seizure*).ti,ab; 47 results. 50. EMBASE; 45 OR 46 OR 47 OR 48 OR 49; 1248 results. 51. EMBASE; pseudoseizure.ti,ab; 84 results. 52. EMBASE; 50 OR 51; 1323 results. 53. EMBASE; 42 AND 52; 106 results. 54. EMBASE; 53 [Limit to: Publication Year 2005-2012]; 74 results.		
Summary	**NA**	**NA**	

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