

1 Rehabilitation for harmful alcohol use and alcohol dependence

1.1. Residential rehabilitation vs outpatient for rehabilitation for harmful alcohol use and alcohol dependence

Quality assessment							Summary of findings				Quality	Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect			
							Residential Rehabilitation	Outpatient	Relative (95% CI)	Absolute		
Abstinence - Percent Days Abstinent at 3 month follow-up (Better indicated by lower values)												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none	58	61	-	SMD 0.22 higher (0.14 lower to 0.58 higher)	□□□□ MODERATE	
Alcohol consumption outcomes - Drinks per drinking day at 3 month follow-up (Better indicated by lower values)												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	no serious imprecision	none	58	61	-	SMD 0.02 higher (0.34 lower to 0.38 higher)	□□□□ HIGH	
Lapse (non-Abstinence) - Number of participants non-abstinent at 6 month follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ²	none	18/26 (69.2%)	15/20 (75%)	RR 0.92 (0.64 to 1.32)	60 fewer per 1000 (from 270 fewer to 240 more)	□□□□ MODERATE	
								75%		60 fewer per 1000 (from 270 fewer to 240 more)		
Lapse (non-Abstinence) - Number of participants non-abstinent at 18-month follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ³	none	20/26 (76.9%)	13/22 (59.1%)	RR 1.3 (0.87 to 1.95)	177 more per 1000 (from 77 fewer to 561 more)	□□□□ MODERATE	
								59.1%		177 more per 1000 (from 77 fewer to 561 more)		
Lapse (non-Abstinence) - Number of participants non-abstinent - 2 year follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	no serious imprecision	none	40/63 (63.5%)	61/73 (83.6%)	RR 0.76 (0.61 to 0.94)	201 fewer per 1000 (from 50 fewer to 326 fewer)	□□□□ HIGH	

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								83.6%		201 fewer per 1000 (from 50 fewer to 326 fewer)		
Drinking frequency - Number drinking < 60g absolute alcohol on a drinking day at 6 month follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁴	none	6/26 (23.1%)	7/20 (35%)	RR 0.66 (0.26 to 1.66)	119 fewer per 1000 (from 259 fewer to 231 more)	□□□□ MODERATE	
								35%				119 fewer per 1000 (from 259 fewer to 231 more)
Drinking frequency - Number drinking < 60g absolute alcohol on a drinking day at 18 month follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁵	none	7/26 (26.9%)	9/22 (40.9%)	RR 0.66 (0.29 to 1.48)	139 fewer per 1000 (from 290 fewer to 196 more)	□□□□ MODERATE	
								40.9%				139 fewer per 1000 (from 290 fewer to 196 more)

¹ 95% confidence interval includes no effect. Upper confidence limit crosses line of 0.5

² 95% confidence interval includes no effect. Both relative risk increase and reduction greater than 25%.

³ 95% confidence interval includes no effect. Relative risk increase greater than 25%.

⁴ 95% confidence interval includes no effect. Relative risk increase greater than 25%.

⁵ 95% confidence interval includes no effect. Relative risk increase greater than 25%.

2.1. Residential rehabilitation vs day hospital for rehabilitation for harmful alcohol use and alcohol dependence

Quality assessment							Summary of findings				Quality	Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect			
							Residential rehabilitation	Day Hospital	Relative (95% CI)	Absolute		
Abstinence - Percent Days Abstinent at 3-month follow-up (Better indicated by lower values)												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none	58	63	-	SMD 0.23 higher (0.13 lower to 0.59 higher)	□□□□ MODERATE	
Alcohol consumption outcomes - Drinks per drinking day at 3 month follow-up (Better indicated by lower values)												
1	randomised	no serious	no serious	no serious	no serious	none	58	63	-	SMD 0.01 higher	□□□□	

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	trials	limitations	inconsistency	indirectness	imprecision						(0.34 lower to 0.37 higher)	HIGH	
Alcohol consumption outcomes - Mean number of drinking days at 3 month follow-up (Better indicated by lower values)													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ²	none	24	24	-		SMD 0.33 higher (0.24 lower to 0.9 higher)	□□□□ MODERATE	
Alcohol consumption outcomes - Mean number of drinking days at 6 month follow-up (Better indicated by lower values)													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	no serious imprecision	none	24	24	-		SMD 0.76 higher (0.17 to 1.35 higher)	□□□□ HIGH	
Alcohol consumption outcomes - Mean number of drinking days at 12 month follow-up (Better indicated by lower values)													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ³	none	24	24	-		SMD 0.51 higher (0.06 lower to 1.09 higher)	□□□□ MODERATE	
Relapse - Posttreatment													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁴	none	4/54 (7.4%)	8/55 (14.5%)	RR 0.51 (0.16 to 1.59)	71 fewer per 1000 (from 122 fewer to 86 more)	□□□□ MODERATE		
						14.6%		72 fewer per 1000 (from 123 fewer to 86 more)					
Relapse - 12-month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁵	none	6/50 (12%)	5/50 (10%)	RR 1.2 (0.39 to 3.68)	20 more per 1000 (from 61 fewer to 268 more)	□□□□ MODERATE		
						10%		20 more per 1000 (from 61 fewer to 268 more)					
Lapse (non-Abstinence) - Number of participants non-abstinent at 6 month follow-up													
2	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁶	none	96/199 (48.2%)	117/268 (43.7%)	RR 1.05 (0.82 to 1.34)	22 more per 1000 (from 79 fewer to 148 more)	□□□□ MODERATE		
						41.9%		21 more per 1000 (from 75 fewer to 142 more)					
Lapse (non-Abstinence) - Number of participants non-abstinent at 12 months													
2	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁷	none	104/189 (55%)	106/204 (52%)	RR 1.05 (0.88 to	26 more per 1000 (from 62 fewer to 130	□□□□ MODERATE		

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									1.25)	more)		
								56.7%		28 more per 1000 (from 68 fewer to 142 more)		
Lapse (non-Abstinence) - Number of participants non-abstinent throughout 12 month follow-up period												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁸	none	44/54 (81.5%)	43/55 (78.2%)	RR 1.04 (0.86 to 1.26)	31 more per 1000 (from 109 fewer to 203 more)	□□□□ MODERATE	
								78.2%		31 more per 1000 (from 109 fewer to 203 more)		
Drinking frequency - Number of participants drinking daily at 6-month follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁹	none	1/60 (1.7%)	8/114 (7%)	RR 0.24 (0.03 to 1.85)	53 fewer per 1000 (from 68 fewer to 60 more)	□□□□ MODERATE	
								7%		53 fewer per 1000 (from 68 fewer to 60 more)		
Attrition (number not retained in treatment)												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹⁰	none	70/291 (24.1%)	128/355 (36.1%)	RR 0.67 (0.52 to 0.85)	119 fewer per 1000 (from 54 fewer to 173 fewer)	□□□□ MODERATE	
								36.1%		119 fewer per 1000 (from 54 fewer to 173 fewer)		

¹ 95% confidence interval includes no effect. Upper confidence limit crosses 0.5

² 95% confidence interval includes no effect. Upper confidence limit crosses 0.5

³ 95% confidence interval includes no effect. Upper confidence limit crosses 0.5

⁴ 95% confidence interval includes no effect. Relative risk increase greater than 25%.

⁵ 95% confidence interval includes no effect. Relative risk increase greater than 25%.

⁶ 95% confidence interval includes no effect. Relative risk increase greater than 25%.

⁷ 95% confidence interval includes no effect.

⁸ 95% confidence interval includes no effect.

⁹ 95% confidence interval includes no effect. Relative risk increase and reduction both greater than 25%.

¹⁰ Relative risk reduction greater than 25%.

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3.1. Day hospital vs outpatient for rehabilitation for harmful alcohol use and alcohol dependence

Quality assessment							Summary of findings				Quality	Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect			
							Day hospital	Outpatient	Relative (95% CI)	Absolute		
Percent days abstinent at 3 month follow-up (Better indicated by lower values)												
2	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	no serious imprecision	none	157	219	-	SMD 0.05 lower (0.26 lower to 0.15 higher)	□□□□ HIGH	
Drinks per drinking day at 3 month follow-up (Better indicated by lower values)												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	no serious imprecision	none	63	61	-	SMD 0.01 higher (0.34 lower to 0.36 higher)	□□□□ HIGH	

4.1. Residential rehabilitation vs residential rehabilitation (2 different treatment approaches) for rehabilitation for harmful alcohol use and alcohol dependence

Quality assessment							Summary of findings				Quality	Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect			
							Residential rehabilitation	Residential Rehabilitation (2 different treatment approaches)	Relative (95% CI)	Absolute		
Relapse - Number relapsed at 4-8 months follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none	32/60 (53.3%)	33/49 (67.3%)	RR 0.79 (0.58 to 1.08)	141 fewer per 1000 (from 283 fewer to 54 more)	□□□□ MODERATE	
								67.4%		142 fewer per 1000 (from 283 fewer to 54 more)		
Relapse - Number relapsed at 8-12 months follow-up												
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ²	none	36/57 (63.2%)	37/51 (72.5%)	RR 0.87 (0.67 to 1.13)	94 fewer per 1000 (from 239 fewer to 94 more)	□□□□ MODERATE	
								72.6%		94 fewer per 1000		

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											(from 240 fewer to 94 more)		
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¹ 95% confidence interval includes no effect. Relative risk reduction greater than 25%.

² 95% confidence interval includes no effect. Relative risk reduction greater than 25%

5.1. Short duration vs longer duration inpatient for rehabilitation for harmful alcohol use and alcohol dependence

Quality assessment							Summary of findings					Quality	Importance
No of studies	Design	Limitations	Inconsistency	Indirectness	Imprecision	Other considerations	No of patients		Effect				
							Short duration	longer duration inpatient	Relative (95% CI)	Absolute			
Lapse(non-Abstinence) - Posttreatment													
3	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ¹	none	240/311 (77.2%)	152/202 (75.2%)	RR 0.94 (0.84 to 1.05)	45 fewer per 1000 (from 120 fewer to 38 more)	MODERATE	□□□□	
								65.3%		39 fewer per 1000 (from 104 fewer to 33 more)			
Lapse(non-Abstinence) - 6 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ²	none	86/105 (81.9%)	74/95 (77.9%)	RR 1.05 (0.91 to 1.21)	39 more per 1000 (from 70 fewer to 164 more)	MODERATE	□□□□	
								77.9%		39 more per 1000 (from 70 fewer to 164 more)			
Lapse(non-Abstinence) - 7 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ³	none	18/29 (62.1%)	21/29 (72.4%)	RR 0.86 (0.6 to 1.23)	101 fewer per 1000 (from 290 fewer to 167 more)	MODERATE	□□□□	
								72.4%		101 fewer per 1000 (from 290 fewer to 167 more)			
Lapse(non-Abstinence) - 10 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁴	none	18/29 (62.1%)	22/29 (75.9%)	RR 0.82 (0.58 to 1.16)	137 fewer per 1000 (from 319 fewer to 121 more)	MODERATE	□□□□	
								75.9%		137 fewer per 1000 (from 319 fewer to 121 more)			

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											more)		
Lapse(non-Abstinence) - 13 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁵	none	18/29 (62.1%)	19/29 (65.5%)	RR 0.95 (0.64 to 1.4)	33 fewer per 1000 (from 236 fewer to 262 more)	MODERATE		
							65.5%			33 fewer per 1000 (from 236 fewer to 262 more)			
Number consuming alcohol 60-90% of time at 3 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁶	none	70/105 (66.7%)	67/95 (70.5%)	RR 0.95 (0.78 to 1.14)	35 fewer per 1000 (from 155 fewer to 99 more)	MODERATE		
							70.5%			35 fewer per 1000 (from 155 fewer to 99 more)			
Number consuming alcohol less than 60% of time at 3 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁷	none	68/105 (64.8%)	61/95 (64.2%)	RR 1.01 (0.82 to 1.24)	6 more per 1000 (from 116 fewer to 154 more)	MODERATE		
							64.2%			6 more per 1000 (from 116 fewer to 154 more)			
Number consuming alcohol less than 60% of the time at 6 month follow-up													
1	randomised trials	no serious limitations	no serious inconsistency	no serious indirectness	serious ⁸	none	0/0 (0%)	0/0 (0%)	RR 0 (0 to 0)	0 fewer per 1000 (from 0 fewer to 0 fewer)	MODERATE		
							0%			0 fewer per 1000 (from 0 fewer to 0 fewer)			

¹ 95% confidence interval includes no effect

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³ 95% confidence interval includes no effect. Relative risk reduction greater than 25%

⁴ 95% confidence interval includes no effect. Relative risk reduction greater than 25%

⁵ 95% confidence interval includes no effect. Relative risk reduction and increase both greater than 25%

⁶ 95% confidence interval includes no effect.

⁷ 95% confidence interval includes no effect.

⁸ 95% confidence interval includes no effect. Relative risk reduction greater than 25%

Economic profile

Inpatient/Outpatient detoxification services versus no treatment

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Study & country	Limitations	Applicability	Other comments	Incremental cost (£)	Incremental effect (QALYs)	ICER (£/QALY)	Uncertainty
Parrot, 2006 UK	Minor Limitations ¹	Directly applicable	Based on a single study of an outpatient detoxification service carried out at the Smithfield Centre in Manchester. Time horizon of 6 months. Not cost-effective at NICE threshold.	1316 ²	0.033	39 867	No sensitivity analysis conducted
Parrot, 2006 UK	Minor Limitations ³	Directly applicable	Based on a single study of a partial hospitalisation programme that was performed at Plummer Court. Time horizon of 6 months. Not cost-effective at NICE threshold.	1246 ⁴	0.008	155 773	No sensitivity analysis conducted

¹ The effectiveness evidence came from a within-group comparison study as no external group was used. The absence of a non-treatment group/usual care group limits the validity of the study results since the changes in the outcome measures might have occurred without the intervention. In effect, the baseline values were implicitly assumed to reflect a no-intervention condition. Moreover, time-dependent confounding variables could not be controlled due to the design of the study, and this might represent a limitation of the analysis. The evidence for each programme came from a single centre, which may not be representative of other institutions. Similarly, the small number of patients and the substantial loss to follow-up further limit the robustness of the analysis.

² Inflated from 2003-04 UK pounds to 2009 values using Hospital and Community Health Services (HCHS) indices (Curtis, 2009)

³ The effectiveness evidence came from a within-group comparison study as no external group was used. The absence of a non-treatment group/usual care group limits the validity of the study results since the changes in the outcome measures might have occurred without the intervention. In effect, the baseline values were implicitly assumed to reflect a no-intervention condition. Moreover, time-dependent confounding variables could not be controlled due to the design of the study, and this might represent a limitation of the analysis. The evidence for each programme came from a single centre, which may not be representative of other institutions. Similarly, the small number of patients and the substantial loss to follow-up further limit the robustness of the analysis.

⁴ Inflated from 2003-04 UK pounds to 2009 values using HCHS indices (Curtis, 2009)