Characteristics of studies

Characteristics of included studies

Abrazado 2014

Methods	Study design: Randomized controlled trial Study grouping: Parallel group
Participants	Baseline Characteristics Intervention 1 • COPD severity (GOLD/MRC score): 63.6 (7.6) FEV1% of predicted • Male (%): 33 % • Age (range): 66.8 (8.1) age (year)
	Intervention 2 • COPD severity (GOLD/MRC score): • Male (%): • Age (range):
	Control • COPD severity (GOLD/MRC score): 60.8 (10.9) FEV1% of predicted • Male (%): 60 % • Age (range): 72.0 (10.1) age (year)
	Overall COPD severity (GOLD/MRC score): Male (%): Age (range):
	Included criteria: Patients with moderate COPD as defined by the GOLD [17] criteria (FEV1/FVC, % 70%;FEV1 70% and >50% predicted), a 10 pack-year smoking history and self-reported functional impairment. Excluded criteria: Exclusion criteria included current smokers, pulmonary diseases other than COPD, use of supplemental oxygen, musculo-skeletal disease that impaired exercise performance and unstable coronary artery disease or congestive heart failure. Pretreatment: There is no difference between subjects at baseline.
Interventions	Intervention Characteristics Intervention 1 • Description: Exercise. Those subjects assigned to theexercise program were assigned to a personal trainer op-erating out of one of three local health clubs. They metat mutually convenient times, twice per week for12 weeks. Each of the clubs provided facilities for aer-obic exercise and resistance training. • Longest follow-up (after end of treatment): After end of treatment • Duration (week): 12 weeks
	Intervention 2 • Description: • Longest follow-up (after end of treatment): • Duration (week):
	 Control Description: Subjects assigned to the control group were told tocontinue their activities of daily living. They were con-tacted by telephone every month to see assess theirprogress Longest follow-up (after end of treatment): After end of treatment Duration (week): 12 weeks
Outcomes	Quality of life, SE Outcome type: ContinuousOutcome
	Quality of life, Cl Outcome type: ContinuousOutcome
	Quality of life, SD Outcome type: ContinuousOutcome
	Mortality, n Outcome type: DichotomousOutcome
	Bike test/cardio-pulmonary test, SE Outcome type: ContinuousOutcome
	Walk test (6-min or SWT), CI Outcome type: ContinuousOutcome
	Walk test (6-min or SWT), SD • Outcome type: ContinuousOutcome
	Walk test (6-min or SWT), SE Outcome type: ContinuousOutcome

	Dropout, n Outcome type: DichotomousOutcome
	Quality of life, SD (longest follow-up) • Outcome type: ContinuousOutcome
	Mortality, SD (longest follow-up) Outcome type: ContinuousOutcome
	Bike test/cardio-pulmonary test, SD (longest follow-up) Outcome type: ContinuousOutcome
	Walk test (6min or SWT), SD (longest follow-up) • Outcome type: ContinuousOutcome
Notes	Sponsorship source: This study was supported by a research grant awarded by Breathe LA(formerly the American Lung Association of Los Angeles County). Thecommunity-based exercise training sessions were provided at the EquinoxFitness Club, Century City, CA; at Phase VI Scientific Health and PerformanceCenter, Santa Monica, CA; and at Mitchell Fitness Systems, Torrance, CA Country: USA Setting:
	Comments: ClinicalTrials.gov Identifier NCT01985529.
	Authors name: Shefalee Amin Institution: Exercise Physiology Research Laboratory, Departments of Physiology Email: CCooper@mednet.ucla.edu
	Address: Exercise Physiology Research Laboratory, Departments of Physiology and Medicine, David Geffen School of Medicine at University of California, LosAngeles, 37-131 Center for Health Sciences, 10833 Le Conte Avenue, LosAngeles, CA 90095-1690, USA
	Notes: Outcomes Quality of life: SGRQ, end of treatment SEMBike test: Endurance-time for constant work rate test (s), end treatment, mean(SEM)Dropout: no. of patients end of treatment

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Nothing mentioned
Allocation concealment (selection bias)	Unclear risk	Nothing mentioned
Blinding of participants and personnel (performance bias)	Unclear risk	Nothing mentioned
Blinding of outcome assessment (detection bias)	Unclear risk	Nothing mentioned
Incomplete outcome data (attrition bias)	Low risk	The n of each group is not clearly stated.
Selective reporting (reporting bias)	Low risk	Matches protocol
Other bias	Low risk	No other apparent bias

deRoos 2017

Methods	Study design: Randomized controlled trial Study grouping: Parallel group	
Participants	Baseline Characteristics Intervention 1 • COPD severity (GOLD/MRC score): 68 (7.7) FEV1 % of predicted • Male (%): 69% female • Age (range): 69.4 (9.7) age (years)	
	Intervention 2 • COPD severity (GOLD/MRC score): • Male (%): • Age (range):	
	Control • COPD severity (GOLD/MRC score): 65 (10.3) FEV1% of predicted • Male (%): 62% female • Age (range): 71.40 (9.4) age (years)	
	Overall COPD severity (GOLD/MRC score): Male (%): Age (range): 	
	Included criteria: Clinically stable patients withknown COPD, diagnosed as GOLD Stage II [50%≤ forcedexpiratory volume in 1 second (FEV1) 80%] according to the GOLD criteria[1], were eligible if they also had ascore of two or more on the Medical Research CouncilDyspnoea Scale, including dyspnoea on this level as a impor-tant prognostic predictor of decreased PA	
	Excluded criteria: Patients with exercise-restricting, non-COPD-related complaints (e.g.severe cardiac or musculoskeletal diseases) were excluded from this study	

	-
Interventions	Intervention Characteristics Intervention 1 Description: Group-based circuit exercise training programme, Longest follow-up (after end of treatment): After end of treatment Duration (week): 10 weeks Intervention 2 Description: Longest follow-up (after end of treatment): Description: Unation (week): Control Description: Standard medical care Longest follow-up (after end of treatment): After end of treatment Duration (week): 10 weeks
Outcomes	Quality of life, SE • Outcome type: ContinuousOutcome Quality of life, CI • Outcome type: ContinuousOutcome Quality of life, SD • Outcome type: ContinuousOutcome Mortality, n • Outcome type: DichotomousOutcome Bike test/cardio-pulmonary test, SE • Outcome type: ContinuousOutcome Walk test (6-min or SWT), CI • Outcome type: ContinuousOutcome Walk test (6-min or SWT), SD • Outcome type: ContinuousOutcome Walk test (6-min or SWT), SE • Outcome type: ContinuousOutcome Walk test (6-min or SWT), SE • Outcome type: DichotomousOutcome Drapout, n • Outcome type: DichotomousOutcome Drapout, n • Outcome type: ContinuousOutcome Outcome type: DichotomousOutcome Outcome type: DichotomousOutcome Outcome type: ContinuousOutcome Mortality, SD (longest follow-up) • Outcome type: ContinuousOutcome Bike test/cardio-pulmonary test, SD (longest follow-up) • Outcome type: ContinuousOutcome Bike test/cardio-pulmonary test, SD (longest follow-up) • Outcome type: ContinuousOutcome
Notes	Sponsorship source: Funding: Eight activity monitors were provided withoutcharge by PAM. PAM had no involvement in the study. Country: The Netherlands Setting: Comments: Clinical trial registration number NL24766.018.08. Authors name: P. de Roos Institution: Physiotherapy Centre De Oppers, De Oppers 3, 9203 GD Drachten, The Netherlands Email: pieterderoos@chello.nl, p.deroos@hotmail.com Address: Physiotherapy Centre De Oppers, De Oppers 3, 9203 GD Drachten, The Netherlands

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	All possible sequences in permuted blocks of four with two intervention and two control tickets were created and placed at random in sequentially numbered order by an individual not affiliated to the study. At intake and under the supervision of the physiotherapist in the primary care centre, participants were instructed to open the first enve- lope. Block randomisation was necessary as no specific data on PA of patients with moderate COPD were available at the outset of the trial.
Allocation concealment (selection bias)	Low risk	Allocation was randomised and concealed using opaque- sealed envelopes.
Blinding of participants and personnel (performance bias)	Unclear risk	Nothing mentioned
Blinding of outcome assessment (detection bias)	Unclear risk	Nothing mentioned
Incomplete outcome data (attrition bias)	Low risk	No other apparent bias

Selective reporting (reporting bias)	Low risk	Matches the study protocol
Other bias	Low risk	No other apparent bias

Gottlieb 2011

Methods	RCT
Participants	Patients with moderate COPD, FEV1 of predicted=64-67%, MRC=1.91-2.0 Participants comprised 61 of 133 referred subjects with moderate COPD. Of the 61 participants, 35 were randomized to receive rehabilitation and 26 subjects to receive standard COPD care from their GP. After randomization 19 subjects dropped out
Interventions	 7-week pulmonary rehabilitation programme and an 18-month follow-up survey or usual care (no rehab) (1) A preliminary motivational personal interview, V1. (2) An intensive 7-week physical training and educational phase led by a multidisciplinary team starting within 1 month of V1. (3) A final interview following completion of the intensive program, V2 (6 months after V1 for subjects in the control group). (4) Follow-up, V3 at 12months afterV1 andV4 at 18months after V1.
Outcomes	HRQoL(SGRQ), walking test(6MWT), Lung function
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	not stated
Allocation concealment (selection bias)	Low risk	sealed envelopes
Blinding of participants and personnel (performance bias)	High risk	not blinded
Blinding of outcome assessment (detection bias)	High risk	not blinded
Incomplete outcome data (attrition bias)	High risk	high drop out rate
Selective reporting (reporting bias)	Low risk	not detected
Other bias	Low risk	not detected

Liu 2012

Methods	RCT
Participants	Patients wih mild to moderate COPD FEV1 of predicted= 74-75%. GOLD stage 1-2. A total of 132 patients with confirmed diagnosis of COPD but no serious comorbidities were randomly allocated to the HQG group (n=51), PR group (n=32), or medical treatment group (n=35).
Interventions	The HQG group received 1 week of HQG training under the supervision of professional coaches, and were then encouraged to participate in a peer-led weekly practice group thrice a week, lasting 1 hour each time, for 6 months. The conventional PR group received the same amount of professional coaching on breathing and aerobic exercises, and peer-led walking or ball game groups. The medical treatment group only received health education on self-exercise.
Outcomes	HRQoL(Zhongshen questionnaire), walking test(6MWT), Lung function, immune cell factors, COPD related admissions
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	block randomisation
Allocation concealment (selection bias)	Unclear risk	not stated
Blinding of participants and personnel (performance bias)	High risk	not blinded
Blinding of outcome assessment (detection bias)	Low risk	blinded
Incomplete outcome data (attrition bias)	Low risk	1 drop out
Selective reporting (reporting bias)	Low risk	not detected
Other bias	Low risk	none detected

Roman 2013

Methods	RCT
Participants	97 patients with moderate COPD. MRC=2 or less. FEV1 of predicted= 60%. 3-month Pulmonary Rehabilitation (PR) program with a further 9 months of maintenance (RHBM group n=32) compared with both PR for 3 months without further maintenance (RHB group N=33) and usual care N=32. Follow-up at 4 (after PR) and 12 months
Interventions	 a) Education program. During weeks 1, 6, and 12, patients received a 45-minute education session on the anatomy and physiology of the respiratory system, the correct use of inhalers and brief counseling on smoking cessation. b) Respiratory Physiotherapy. Each session included a series of exercises, lasting a total of 15 minutes and including self-conscious breathing control, and exercises for the chest wall and abdominal muscle walls. c) Low intensity peripheral muscle training. Each session included abdominal muscle walls. c) Low intensity peripheral muscle training. Each session included abdominal and upper and lower limb exercises, shoulder and full arm circling, weight-lifting and other exercises. This training has been described previously [21] and used in other clinical trials [22,23]. Each exercise was repeated 8-10 times over 45 minutes. Control group These patients did not participate in either of the intervention programs; rather, they remained under the routine care of their general practitioner and nurse throughout
Outcomes	HRQoL(CRQ), walking test(6MWT), COPD related admissions
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	computer randomisation
Allocation concealment (selection bias)	Low risk	computer randomisation
Blinding of participants and personnel (performance bias)	High risk	not blinded
Blinding of outcome assessment (detection bias)	Low risk	blinded
Incomplete outcome data (attrition bias)	High risk	More than 50% drop out rate
Selective reporting (reporting bias)	Low risk	not detected
Other bias	Low risk	non detected

van Wetering 2009

Methods	RCT
Participants	199 patients with COPD, baseline FEV1 of predicted 58-60%, MRC score 1.5-1.7. Randomised into INTERCOM rehab=102 or usual care 97
Interventions	The intervention: 4-month standardised supervised rehabilitation phase and a 20-month active maintenance phase. The programme was designed to improve and subsequently maintain exercise capacity, to promote selfmanagement skills and improve knowledge of COPD. Nutritional intervention and smoking cessation support were provided when indicated.During the first 4 months the patients visited the physiotherapists twice a week (30 min per visit) for intensive exercise training consisting of endurance training (cycling and walking) and four specific exercises for upper and lower extremities to improve both strength and endurance without the use of special equipment. Patients were instructed to perform the same exercises twice a day during 30 min in their home environment in addition to walking and cycling outside. Furthermore, all patients participated in an individualised education programme that was structured using a patient education book. All smokers were assigned to the respiratory nurse for standardised smoking cessetion.12 Nutritionally depleted patients received scheduled counselling (four visits) by a dietician and nutritional supplements (Respifor, Nutricia, The Netherlands).

	Primary outcomes were change from baseline in disease-specific quality of life as assessed by the St George's Respiratory Questionnaire (SGRQ) total score and the total number of exacerbations (moderate plus severe) Secondary outcomes were change from baseline in subscores of the SGRQ (symptom, activity and impact scores), dyspnoea (modified MRC dyspnoea scale),16 exercise performance (Wmax), cycle endurance test (CET) at 50% Wmax for maximal 10 min and thereafter at 70% Wmax until exhaustion,13 6- minute walking test (6MWD), muscle strength (handgrip force (HGF), isometric quadriceps peak torque (QPT), maximal inspiratory mouth pressure (Pimax)),17 body composition (fatfree mass (FFM))18 and lung function.
Notes	SGRQ, C-P exercise test, 6MWT, muscle strength

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	computer randomisation
Allocation concealment (selection bias)	Unclear risk	computer randomisation
Blinding of participants and personnel (performance bias)	High risk	not blinded
Blinding of outcome assessment (detection bias)	Low risk	blinded
Incomplete outcome data (attrition bias)	High risk	difference between groups in drop outs
Selective reporting (reporting bias)	Low risk	not detected
Other bias	Low risk	none detected

Footnotes

Characteristics of excluded studies

Footnotes

Characteristics of studies awaiting classification Footnotes

Characteristics of ongoing studies

Footnotes

Summary of findings tables

Additional tables

References to studies

Included studies

Abrazado 2014

[Empty]

deRoos 2017

[Empty]

Gottlieb 2011

[Empty]

Liu 2012

[Empty]

Roman 2013

[Empty]

van Wetering 2009 [Empty]

Excluded studies

Studies awaiting classification

Ongoing studies

Other references

Additional references

Other published versions of this review

Classification pending references

Data and analyses

1 Rehabilitation versus no rehabilitation

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 CP exercise test. End of treatment	1	19	Mean Difference (IV, Fixed, 95% CI)	228.00 [-108.81, 564.81]
1.1.1 End of treatment	1	19	Mean Difference (IV, Fixed, 95% CI)	228.00 [-108.81, 564.81]
1.2 CP exercise test. Longest follow-up. Change	1	175	Mean Difference (IV, Fixed, 95% CI)	205.00 [-11.19, 421.19]
1.2.2 Longest follow-up. Change	1	175	Mean Difference (IV, Fixed, 95% CI)	205.00 [-11.19, 421.19]
1.3 Walking test. End of treatment	1	45	Mean Difference (IV, Fixed, 95% CI)	43.00 [-8.18, 94.18]
1.3.1 End of treatment	1	45	Mean Difference (IV, Fixed, 95% CI)	43.00 [-8.18, 94.18]
1.4 Walking test. Longest follow-up	4	313	Mean Difference (IV, Random, 95% CI)	13.66 [-5.57, 32.89]
1.4.2 Longest follow-up	4	313	Mean Difference (IV, Random, 95% CI)	13.66 [-5.57, 32.89]
1.6 Quality of life. End of treatment	3	99	Std. Mean Difference (IV, Random, 95% CI)	0.06 [-0.34, 0.46]
1.6.1 End of treatment	3	99	Std. Mean Difference (IV, Random, 95% CI)	0.06 [-0.34, 0.46]
1.7 Quality of life. Longest follow-up. Change	1	175	Mean Difference (IV, Random, 95% CI)	-4.20 [-4.51, -3.89]
1.7.2 Longest follow-up. Change	1	175	Mean Difference (IV, Random, 95% CI)	-4.20 [-4.51, -3.89]
1.8 Mortality. Longest follow-up	4	328	Odds Ratio (M-H, Fixed, 95% CI)	1.33 [0.51, 3.43]
1.8.1 Longest follow-up	4	328	Odds Ratio (M-H, Fixed, 95% CI)	1.33 [0.51, 3.43]
1.9 Dropout. End of treatment	2	71	Risk Ratio (M-H, Random, 95% CI)	3.67 [0.93, 14.44]
1.9.1 End of treatment	2	71	Risk Ratio (M-H, Random, 95% CI)	3.67 [0.93, 14.44]

Figures

Figure 1 (Analysis 1.1)

	Rehabilitation				Control			Mean Difference	Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% Cl	ABCDEFG
1.1.1 End of treatment	t									
Abrazado 2014 Subtotal (95% CI)	578	441	9 9	350	281.44271175	10 10	100.0% 100.0 %	228.00 [-108.81, 564.81] 228.00 [-108.81, 564.81]		????***
Heterogeneity: Not app Test for overall effect: 2		(P = 0).18)							
Total (95% CI) Heterogeneity: Not app Test for overall effect: 2 Test for subgroup diffe	Z = 1.33 (ble		10	100.0%	228.00 [-108.81, 564.81]	-1000 -500 0 500 Favours control Favours rehal	1000 bilitation

Risk of bias legend

(A) Random sequence generation (selection bias) (B) Allocation concealment (selection bias)

(C) Blinding of participants and personnel (performance bias)

(D) Blinding of outcome assessment (detection bias)

(E) Incomplete outcome data (attrition bias) (F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.1 CP exercise test. End of treatment.

Figure 2 (Analysis 1.2)

	Re	habilitatio	n		Control			Mean Difference	Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% CI	ABCDEFG
1.2.2 Longest follow	up. Cha	nge								
van Wetering 2009 Subtotal (95% Cl)	234	722.324	87 87	29	736.8629	88 88	100.0% 100.0 %			•?••••
Heterogeneity: Not ap	oplicable)								
Test for overall effect:	Z=1.86	6 (P = 0.06))							
Total (95% CI)			87			88	100.0%	205.00 [-11.19, 421.19]	•	
Heterogeneity: Not ap	oplicable	9								
Test for overall effect:	Z=1.86	6 (P = 0.06))						-1000 -500 0 500 100 Favours control Favours rehabilita	
Test for subgroup dif	ferences	: Not appli	cable							
Risk of bias legend										
(A) Random sequen	ce gener	ation (sele	ection b	ias)						
(B) Allocation concea	lment (s	election bi	as)							
(C) Blinding of partici	pants ar	id personn	el (per	forman	ce bias)					
(D) Blinding of outcor	ne asse	ssment (d	etectio	n bias)						
(E) Incomplete outcor	me data	(attrition bi	as)							
(F) Selective reporting	g (reporti	ng bias)								

(G) Other bias

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.2 CP exercise test. Longest follow-up. Change.

Figure 3 (Analysis 1.3)

• •										
	Reha	bilitati	ion	С	ontrol			Mean Difference	Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Fixed, 95% CI	IV, Fixed, 95% Cl	ABCDEFG
1.3.1 End of treatme	nt									
deRoos 2017	406.6	90.9	21	363.6	83.2	24	100.0%	43.00 [-8.18, 94.18]		•••??•••
Subtotal (95% CI)			21			24	100.0 %	43.00 [-8.18, 94.18]	•	
Heterogeneity: Not a	pplicable									
Test for overall effect	Z=1.65	5 (P = 0).10)							
Total (95% CI)			21			24	100.0%	43.00 [-8.18, 94.18]	◆	
Heterogeneity: Not a	pplicable	!								
Test for overall effect	Z=1.65	5 (P = 0).10)						-500 -250 Ó 250 500 Favours control Favours rehabil	itation
Test for subgroup dif	ferences	: Not a	pplical	ble					Favours control Favours reliable	itation
<u>Risk of bias legend</u>										
(A) Random sequen	ce gener	ation (selecti	on bias))					
(B) Allocation concea	ilment (s	electio	n bias))						
(C) Blinding of partici	pants an	id pers	onnel	(perform	nance	bias)				
(D) Blinding of outcor	ne asse	ssmer	nt (dete	ction bia	as)					
(E) Incomplete outco	me data	(attritic	on bias)						
(F) Selective reporting	g (reporti	ng bia	s)							
(G) Other bias										

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.3 Walking test. End of treatment.

Figure 4 (Analysis 1.4)

	Reha	bilitati	ion	C	ontrol			Mean Difference	Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl	ABCDEFG
1.4.2 Longest follow	-up									
Gottlieb 2011	442	94	21	405	81	20	9.7%	37.00 [-16.63, 90.63]	+	? • • • • • •
Liu 2012	436	23.8	32	407	22.8	35	35.3%	29.00 [17.82, 40.18]	=	
Roman 2013	0.9	48	16	27.3	39.6	14	19.4%	-26.40 [-57.76, 4.96]		
van Wetering 2009	-1.4	36.4	87	-15.3	36.6	88	35.6%	13.90 [3.08, 24.72]		
Subtotal (95% CI)			156			157	100.0%	13.66 [-5.57, 32.89]	•	
Heterogeneity: Tau ² :	= 240.21;	Chi²=	: 12.41	df = 3 (P = 0.0	006); I ^z	= 76%			
Test for overall effect	: Z = 1.39	(P=0).16)							
Total (95% CI)			156			157	100.0%	13.66 [-5.57, 32.89]	•	
Heterogeneity: Tau ² :	= 240.21;	Chi²=	12.41	df = 3 (P = 0.0	006); I ^z	= 76%			
Test for overall effect	: Z = 1.39	(P = 0).16)						-200 -100 Ó 100 200 Favours control Favours rehabilitatio	n
Test for subgroup dif	fferences	: Not a	pplicat	ole					Tavours control Tavours remabilitatio	
Risk of bias legend										
(A) Random sequen	ce gener	ation (selecti	on bias)						
(B) Allocation concea	alment (s	electio	n bias)							
(C) Blinding of partici	ipants an	d pers	onnel	perform	nance	bias)				
(D) Direction of evidence				10.000						

(D) Blinding of outcome assessment (detection bias)

(E) Incomplete outcome data (attrition bias)

(F) Selective reporting (reporting bias) (G) Other bias

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.4 Walking test. Longest follow-up.

Figure 6 (Analysis 1.6)

	Reh	abilitatio	n	С	ontrol		:	Std. Mean Difference	Std. Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl	ABCDEFG
1.6.1 End of treatme	nt									
Abrazado 2014	34.4	19.606	10	27.6	13.8	9	19.0%	0.38 [-0.53, 1.29]		?????•••
deRoos 2017	95.3	16.3	21	91.6	18	24	45.6%	0.21 [-0.38, 0.80]		••??•••
Gottlieb 2011	22.15	14.2	17	26.17	11.3	18	35.4%	-0.31 [-0.97, 0.36]		? • • • • • •
Subtotal (95% CI)			48			51	100.0%	0.06 [-0.34, 0.46]	•	
Heterogeneity: Tau ² :	= 0.00; Cl	hi ^z = 1.89	l, df = 2	(P = 0.3	39); i ² =	= 0%				
Test for overall effect	: Z = 0.29	9 (P = 0.7	7)							
Total (95% CI)			48			51	100.0%	0.06 [-0.34, 0.46]	•	
Heterogeneity: Tau ² :	= 0.00; Cl	hi ² = 1.89	l, df = 2	(P = 0.3	39); i ² :	= 0%				<u>+</u>
Test for overall effect	: Z = 0.29	P = 0.7	7)						Favours control Favours rehabi	4 litation
Test for subgroup dif	fferences	: Not app	licable							Intation
Risk of bias legend										
(A) Random sequen	ce gener	ation (se	lection	bias)						
(B) Allocation concea	alment (s	election b	oias)							
(C) Blinding of partici	ipants an	id person	inel (pe	erformai	nce bia	as)				
(D) Blinding of outcom	me asse	ssment (detecti	on bias)					

(E) Incomplete outcome data (attrition bias)

(F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.6 Quality of life. End of treatment.

Figure 7 (Analysis 1.7)

	Reha	bilitati	ion	Co	ontro	I		Mean Difference	Mean Difference	Risk of Bias
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% Cl	IV, Random, 95% Cl	ABCDEFG
1.7.2 Longest follow-	up. Char	ige								
van Wetering 2009 Subtotal (95% CI)	-3.9	1.1	87 87	0.3	1	88 88	100.0% 100.0 %	-4.20 [-4.51, -3.89] - 4.20 [-4.51, -3.89]	-	• ? • • • • •
Heterogeneity: Not ap	plicable									
Test for overall effect:	Z = 26.4	2 (P <	0.0000	01)						
Total (95% CI)			87			88	100.0%	-4.20 [-4.51, -3.89]	•	
Heterogeneity: Not ap	plicable									_
Test for overall effect:	Z = 26.4	2 (P <	0.0000)1)				F	-4 -2 0 2 4 avours rehabilitation Favours control	
Test for subgroup diff	ferences:	Not a	pplicat	ble				Г	avours reliabilitation - Favours control	
Risk of bias legend										
(A) Random sequend	ce genera	ation (selecti	on bias))					
(B) Allocation concea	Iment (se	electio	n bias)							
(C) Blinding of partici	pants and	d pers	onnel	(perform	nanc	e bias)				
(D) Blinding of outcon	ne asses	ssmer	nt (dete	ction bia	as)					
(E) Incomplete outcor	me data (attritio	n bias)	-					
(F) Selective reporting										
(G) Other bias		_								

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.7 Quality of life. Longest follow-up. Change.

Figure 8 (Analysis 1.8)

	Rehabilit	ation	Conti	ol		Odds Ratio	Odds Ratio	Risk of Bias
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% Cl	M-H, Fixed, 95% Cl	ABCDEFG
1.8.1 Longest follow	-up							
Gottlieb 2011	2	10	0	16	4.1%	9.71 [0.42, 225.84]		? • • • • • •
Liu 2012	0	36	0	35		Not estimable		
Roman 2013	0	22	2	23	32.2%	0.19 [0.01, 4.21]	← ■	
van Wetering 2009 Subtotal (95% CI)	7	95 163	5	91 165	63.7% 100.0 %	1.37 [0.42, 4.48] 1.33 [0.51, 3.43]		
Total events	9		7					
Total (95% Cl)		163		165	100.0%	1.33 [0.51, 3.43]	-	
Total events	9		7					
Heterogeneity: Chi ² =	= 3.05, df = 3	2 (P = 0	.22); I ² = 3	34%				
Test for overall effect	: Z = 0.59 (F	P = 0.56)			F	0.01 0.1 1 10 100 avours rehabilitation Favours control	
Test for subgroup dif	fferences: N	lot appl	icable			1		
<u>Risk of bias legend</u>								
(A) Random sequen	-			IS)				
(B) Allocation concea			,					
(C) Blinding of partici					e bias)			
(D) Blinding of outco				bias)				
(E) Incomplete outco	me data (at	trition b	ias)					

(E) Incomplete outcome data (attrition bia

(F) Selective reporting (reporting bias)

(G) Other bias

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.8 Mortality. Longest follow-up.

Figure 9 (Analysis 1.9)

	Rehabilitation		Control		Risk Ratio	Risk Ratio	Risk of Bias
Events	Total	Events	Total	Weight	M-H, Random, 95% Cl	M-H, Random, 95% Cl	ABCDEFG
5	9	0	10	24.3%	12.10 [0.76, 192.23]	· · · · · · · · · · · · · · · · · · ·	?????
5	26	2	26	75.7%	2.50 [0.53, 11.74]	│	•••??•••
	35		36	100.0 %	3.67 [0.93, 14.44]	◆	
10		2					
.02; Chi ² :	= 1.02,	df = 1 (P	= 0.31)	; I² = 2%			
= 1.86 (P	= 0.06))					
	35		36	100.0%	3.67 [0.93, 14.44]	•	
10		2					
.02; Chi ² :	= 1.02,	df = 1 (P	= 0.31)	; I² = 2%			-
= 1.86 (P	= 0.06))					J
ences: Ni	ot appli	cable				avours remainmation in avours control	
generatio	n (sele	ection bia	s)				
-	-						
			mance	bias)			
			,				
-							
: :: :: ::	5 10 .02; Chi ² := 1.86 (P 10 .02; Chi ² := 1.86 (P ences: N generation to see nt seessr e data (att	5 26 35 10 .02; Chi ² = 1.02, = 1.86 (P = 0.06) 35 10 .02; Chi ² = 1.02, = 1.86 (P = 0.06) ences: Not appli generation (sele- tent (selection bi- nts and personn assessment (d	$\begin{array}{cccc} 5 & 26 & 2\\ 35 & 2\\ 10 & 2\\ .02; \ Chi^2 = 1.02, \ df = 1 \ (P = 1.86 \ (P = 0.06) & \\ & 35 & \\ 10 & 2\\ .02; \ Chi^2 = 1.02, \ df = 1 \ (P = 1.66 \ (P = 0.06) & \\ & ences: \ Not \ applicable & \\ ences: \ Not \ applicable & \\ generation \ (selection \ bias) & \\ nts \ and \ personnel \ (perform a ssessment \ (detection \ bias) & \\ & edata \ (attrition \ bias) & \\ \end{array}$	$\begin{array}{ccccc} 5 & 26 & 2 & 26 \\ 35 & 36 \\ 10 & 2 \\ .02; \ Chi^2 = 1.02, \ df = 1 \ (P = 0.31) \\ = 1.86 \ (P = 0.06) \\ \hline & 35 & 36 \\ 10 & 2 \\ .02; \ Chi^2 = 1.02, \ df = 1 \ (P = 0.31) \\ = 1.86 \ (P = 0.06) \\ ences: \ Not applicable \\ ences: \ Not applicable \\ generation \ (selection \ bias) \\ nts \ and \ personnel \ (performance assessment \ (detection \ bias) \\ e \ assessment \ (detection \ bias) \\ e \ data \ (attrition \ bias) \\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Forest plot of comparison: 1 Rehabilitation versus no rehabilitation, outcome: 1.9 Dropout. End of treatment.