

NKR 40: PICO 6 *Bør patienter med nyopståede lænderygsmerter tilbydes superviseret fysisk træning i tillæg til vanlig behandling?*

Review information

Authors

[Empty name]¹

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Citation example: [Empty name]. NKR 40: PICO 6 *Bør patienter med nyopståede lænderygsmerter tilbydes superviseret fysisk træning i tillæg til vanlig behandling?*. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Abstract

Background

Objectives

Search methods

Selection criteria

Data collection and analysis

Main results

Authors' conclusions

Characteristics of studies

Characteristics of included studies

Cherkin 1998

Methods	
Participants	
Interventions	
Outcomes	
Identification	
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	High risk	SR Oosterhuis 2011
Selective outcome reporting	Low risk	
Incomplete outcome data	Low risk	
Sequence Generation	Low risk	
Other sources of bias	Low risk	
Allocation concealment	Low risk	

Blinding of participants and personnel	High risk	
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Chok 1999

Methods	
Participants	
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Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	High risk	SR Oosterhuis 2011
Selective outcome reporting	Low risk	
Incomplete outcome data	High risk	
Sequence Generation	Low risk	
Other sources of bias	Low risk	
Allocation concealment	Unclear risk	No
Blinding of participants and personnel	High risk	

Faas 1995

Methods	<p>Study design: Randomized controlled trial</p> <p>Study grouping: Parallel group</p> <p>Open Label:</p> <p>Cluster RCT:</p>
Participants	<p>Baseline Characteristics</p> <p>Intervention</p> <p>Kontrol</p> <p>Included criteria: LBP between t12 and gluteal fold, 16-65 yrs for three wks or less w/without pain radiating into the upper leg</p> <p>Excluded criteria: Pain more than 2 months, signs of radiculopathy or nerve neurologic deficit, traumatic onset, hx of back surgery or a recent episode of LBP, systemic disease and pregnancy</p> <p>Pretreatment: similar at baseline</p>
Interventions	<p>Intervention Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● <i>Øvelses terapi + sædvanlig behandling (Usual care=information):</i> 2 individual exercise sessions with a physio for 5 weeks. Consisted of ergonomic advice, relaxing resting positions and stretching ● <i>Sædvanlig behandling (Usual care):</i> Information on back pain and analgesic, pharmacologic treatment <p>Kontrol</p> <ul style="list-style-type: none"> ● <i>Øvelses terapi + sædvanlig behandling (Usual care=information):</i> ● <i>Sædvanlig behandling (Usual care):</i> x
Outcomes	<p><i>Sygefravær, antal dage - 6-18 måneder (Sickleave, days)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: dage ● Direction: Lower is better ● Data value: Endpoint
Identification	<p>Sponsorship source: None declared</p> <p>Country: The Netherlands</p> <p>Setting: Primary care</p> <p>Comments: Title: A randomized trial of Exercise therapy in patients with acute low back pain</p>

	<p>Authors name: Fass, A Institution: Department of general practice and nursing home medicine, Institute for research in extramural medicine, Vrije University of Amsterdam, Holland Email: Address:</p>
Notes	<p><i>Fagkonsulent Nkr40 on 24/02/2016 19:14</i> Outcomes All cause sickness absence - table 2</p>

Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	High risk	SR Oosterhuis 2011
Selective outcome reporting	Low risk	
Incomplete outcome data	Low risk	
Sequence Generation	Low risk	
Other sources of bias	Unclear risk	Judgement Comment: Intention to treat analysis not performede correctly
Allocation concealment	Low risk	
Blinding of participants and personnel	High risk	

Machado 2010

Methods	<p>Study design: Randomized controlled trial Study grouping: Parallel group Open Label: Cluster RCT:</p>
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<p>Participants</p>	<p>Baseline Characteristics</p> <p>Intervention</p> <p>Kontrol</p> <p>Included criteria: To be eligible for inclusion, patients had to be 18 to 80 years old, present with a new episode of acute non-specific low back pain and be able and willing to visit one of the trial physical therapists for commencement of the McKenzie treatment program within 48 h of presentation to the physician.</p> <p>Excluded criteria: Patients were excluded if they had any of the following: nerve root compromise; 'red flags' for serious spinal pathology (for example, infection, fracture); spinal surgery in the past 6 months; pregnancy; severe cardiovascular or metabolic disease; or the inability to read and understand English</p> <p>Pretreatment: Similar at baseline</p>
<p>Interventions</p>	<p>Intervention Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● <i>McKenzie øvelser + sædvanlig behandling:</i> In addition to the first-line care, participants in the McKenzie Group were immediately referred to a physical therapist and started a treatment programme based on the McKenzie method within 48 h of their consultation with the physician. After testing the participants' pain response to a comprehensive physical examination, therapists initially classified each patient into one of the three McKenzie syndromes (derangement, dysfunction, or postural) and an individualized treatment programme matching this classification was then provided. ● <i>Sædvanlig behandling (first line care):</i> The first-line care consisted of the provision of advice to remain active and to avoid bed rest, reassurance of the favourable prognosis of acute low back pain and instructions to take acetaminophen (paracetamol) on a time-contingent basis. Non-steroidal anti-inflammatory drugs (NSAIDs) were not prescribed during the ensuing 3 weeks. However, participants already on a course of NSAIDs when first visiting the primary care physician were allowed to continue use of this medication. Participants were instructed to follow the physician's advice for the next 3 weeks and, if necessary, to return for follow-up visits during this period. Although there was no limit to the number of follow-up visits, physicians were instructed to restrict treatment to advice and simple analgesics. <p>Kontrol</p> <ul style="list-style-type: none"> ● <i>McKenzie øvelser + sædvanlig behandling:</i> ● <i>Sædvanlig behandling (first line care):</i> x

<p>Outcomes</p>	<p><i>Funktionsevne 0-12 uger (Disability)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: Roland Morris ● Range: 0-24 ● Unit of measure: none ● Direction: Lower is better ● Data value: Endpoint <p><i>Smerteniveau 0-12 uger (Pain)</i></p> <ul style="list-style-type: none"> ● Outcome type: ContinuousOutcome ● Reporting: Fully reported ● Scale: NRS ● Range: 0-10 ● Unit of measure: none ● Direction: Lower is better ● Data value: Endpoint
<p>Identification</p>	<p>Sponsorship source: This work was supported by a research and development grant from the University of Sydney, Australia. Dr Machado is a research fellow supported by Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG), Brazil. Dr Machado's PhD was supported by a scholarship from the Australian Government. Professor Maher and Associate Professor Herbert are senior research fellows funded by the National Health & Medical Research Council (NHMRC), Australia.</p> <p>Country: Australia</p> <p>Setting: Primary care</p> <p>Comments: Title: The effectiveness of the McKenzie method in addition to first-line care for acute low back pain: a randomized controlled trial</p> <p>Authors name: Luciana AC Machado^{1,2}, Chris G Maher^{1*}, Rob D Herbert¹, Helen Clare³, James H McAuley</p> <p>Institution: Correspondence: The George Institute for International Health, PO Box M201 Missenden Rd Sydney, NSW 2050, Australia</p> <p>Email: cmaher@george.org.au</p> <p>Address: PO Box M201 Missenden Rd Sydney, NSW 2050, Australia</p>

Notes	<p>Thorvaldur Skuli Palsson on 25/02/2016 17:50</p> <p>Outcomes</p> <p>Ved follow up er variabiliteten indikeret med SE</p>
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Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	Unclear risk	Judgement Comment: not reported. SR Oosterhuis 2011
Selective outcome reporting	Low risk	
Incomplete outcome data	Low risk	
Sequence Generation	Low risk	
Other sources of bias	Low risk	
Allocation concealment	Low risk	
Blinding of participants and personnel	High risk	

Pengel 2007

Methods	<p>Study design: Randomized controlled trial</p> <p>Study grouping: Parallel group</p> <p>Open Label:</p> <p>Cluster RCT:</p>
Participants	<p>Baseline Characteristics</p> <p>Intervention</p> <p>Kontrol</p> <p>Included criteria: 18 and 80 years of age with nonspecific low back pain lasting for at least 6 weeks but no longer than 12 weeks.</p> <p>Excluded criteria: Exclusion criteria were spinal surgery in the past 12 months, pregnancy, nerve root compromise, confirmed or suspected serious spinal abnormality (for example, infection, fracture, or thecauda equina syndrome), contraindications to exercise, and poor comprehension of the English language.</p>

	Pretreatment: Similar at baseline
Interventions	<p>Intervention Characteristics</p> <p>Intervention</p> <ul style="list-style-type: none"> ● <i>Øvelser og rådgivning (Exercise and advice):</i> an individualized, progressive, submaximal program designed to improve the abilities of participants to complete functional activities that they specified as being difficult to perform because of low back pain. Each participant undertook aerobic exercise (for example, a walking or cycling program); stretches; functional activities; activities to build speed, endurance, and coordination; and trunk- and limb-strengthening exercises. Physiotherapists used principles of cognitive-behavioral therapy, including setting goals of progressively increasing difficulty, encouraging self-monitoring of progress, and promoting self-reinforcement (9). Physiotherapists provided individualized home exercise programs, which they regularly reviewed, and they encouraged continuation of the home program after the intervention finished. Advice: The physiotherapist explained the benign nature of low back pain, addressed any unhelpful beliefs about back pain, and emphasized that being overly careful and avoiding light activity would delay recovery. ● <i>Rådgivning (Sham exercise and advice):</i> The control for the exercise intervention consisted of sham pulsed ultrasonography (5 minutes) and sham pulsed short-wave diathermy (20 minutes). The sham units were identical to active units (for example, the on and off lights illuminated and the output dial moved) except that they did not provide output. To optimize treatment credibility, physiotherapists followed the usual clinical routine for delivering these treatments. The active forms of these treatments delivered in pulsed mode do not produce heat; thus, previous experience with the treatments would not unblind participants. Participants allocated to exercise did not receive the active forms of these treatments. Advice: The physiotherapist explained the benign nature of low back pain, addressed any unhelpful beliefs about back pain, and emphasized that being overly careful and avoiding light activity would delay recovery. <p>Kontrol</p> <ul style="list-style-type: none"> ● <i>Øvelser og rådgivning (Exercise and advice):</i> ● <i>Rådgivning (Sham exercise and advice):</i> x
Outcomes	<p><i>Funktionsevne 0-12 uger (Disability)</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Partially reported ● Scale: Roland Morris ● Range: 0-24 ● Direction: Lower is better

- **Data value:** Endpoint

Smerteniveau 0-12 uger (Pain)

- **Outcome type:** ContinuousOutcome
- **Reporting:** Partially reported
- **Scale:** NRS
- **Range:** 0-10
- **Direction:** Lower is better
- **Data value:** Endpoint

Smerteniveau 6-18 måneder (Pain)

- **Outcome type:** ContinuousOutcome
- **Reporting:** Partially reported
- **Scale:** NRS
- **Range:** 0-10
- **Direction:** Lower is better
- **Data value:** Endpoint

Funktionsevne 6-18 måneder (Disability)

- **Outcome type:** ContinuousOutcome
- **Reporting:** Partially reported
- **Scale:** Roland Morris
- **Range:** 0-24
- **Direction:** Lower is better
- **Data value:** Endpoint

Frafald pga. bivirkninger

- **Outcome type:** ContinuousOutcome
- **Reporting:** Fully reported
- **Scale:** Antal
- **Direction:** Lower is better
- **Data value:** Endpoint

Identification	<p>Sponsorship source: : In part by a National Health and Medical Research Council of Australia Project grant (no. 107203) and the Australasian Low Back Pain Trial Committee. The Australasian Low Back Pain Trial Committee comprises Musculoskeletal Physiotherapy Australia, Physiotherapy Business Australia, and the New Zealand Manipulative Physiotherapists Association. Drs. Maher and Herbert hold research fellowships funded by the National Health and Medical Research Council of Australia.</p> <p>Country: Australia and New Zealand</p> <p>Setting: 7 university hospitals and primary care clinics</p> <p>Comments: Title: Physiotherapist-Directed Exercise, Advice, or Both for Subacute Low Back Pain</p> <p>Authors name: Liset H.M. Pengel, PhD; Kathryn M. Refshauge, PhD; Christopher G. Maher, PhD; Michael K. Nicholas, PhD; Robert D. Herbert, PhD; and Peter McNair, PhD</p> <p>Institution: Centre for Evidence in Transplantation</p> <p>Email:</p> <p>Address: Dr. Pengel: Centre for Evidence in Transplantation, Royal College of Surgeons of England, 35-43 Lincoln's Inn Fields, London WC2A 3PE, United Kingdom</p>
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	Low risk	
Selective outcome reporting	Low risk	
Incomplete outcome data	Low risk	
Sequence Generation	Low risk	
Other sources of bias	Low risk	
Allocation concealment	Low risk	
Blinding of participants and personnel	Unclear risk	No info

Seferlis 1998

Methods	
Participants	
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Outcomes	
Identification	
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Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	High risk	SR Oosterhuis 2011
Selective outcome reporting	Low risk	
Incomplete outcome data	High risk	
Sequence Generation	Unclear risk	No
Other sources of bias	Low risk	
Allocation concealment	Unclear risk	No
Blinding of participants and personnel	High risk	

Storheim 2003

Methods	
Participants	
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Outcomes	
Identification	

Notes

Risk of bias table

Bias	Authors' judgement	Support for judgement
Blinding of outcome assessors	Low risk	
Selective outcome reporting	Low risk	
Incomplete outcome data	High risk	
Sequence Generation	Unclear risk	n
Other sources of bias	Unclear risk	n
Allocation concealment	Low risk	
Blinding of participants and personnel	High risk	

Footnotes

References to studies

Included studies

Cherkin 1998

[Empty]

Chok 1999

[Empty]

Faas 1995

Faas,A.; van Eijk,J. T.; Chavannes,A. W.; Gubbels,J. W.. A randomized trial of exercise therapy in patients with acute low back pain. Efficacy on sickness absence. Spine 1995;20(8):941-947. [DOI:]

Machado 2010

Machado,L. A.; Maher,C. G.; Herbert,R. D.; Clare,H.; McAuley,J. H.. The effectiveness of the McKenzie method in addition to first-line care for acute low back pain: a randomized controlled trial. BMC medicine 2010;8(Journal Article):10-7015-8-10. [DOI: 10.1186/1741-7015-8-10 [doi]]

Pengel 2007

Pengel,L. H.; Refshauge,K. M.; Maher,C. G.; Nicholas,M. K.; Herbert,R. D.; McNair,P.. Physiotherapist-directed exercise, advice, or both for subacute low back pain: a randomized trial. Annals of Internal Medicine 2007;146(11):787-796. [DOI: 146/11/787 [pii]]

Seferlis 1998

Seferlis,T.; Nemeth,G.; Carlsson,A. M.; Gillstrom,P.. Conservative treatment in patients sick-listed for acute low-back pain: a prospective randomised study with 12 months' follow-up. European spine journal : official publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society 1998;7(6):461-470. [DOI:]

Storheim 2003

[Empty]

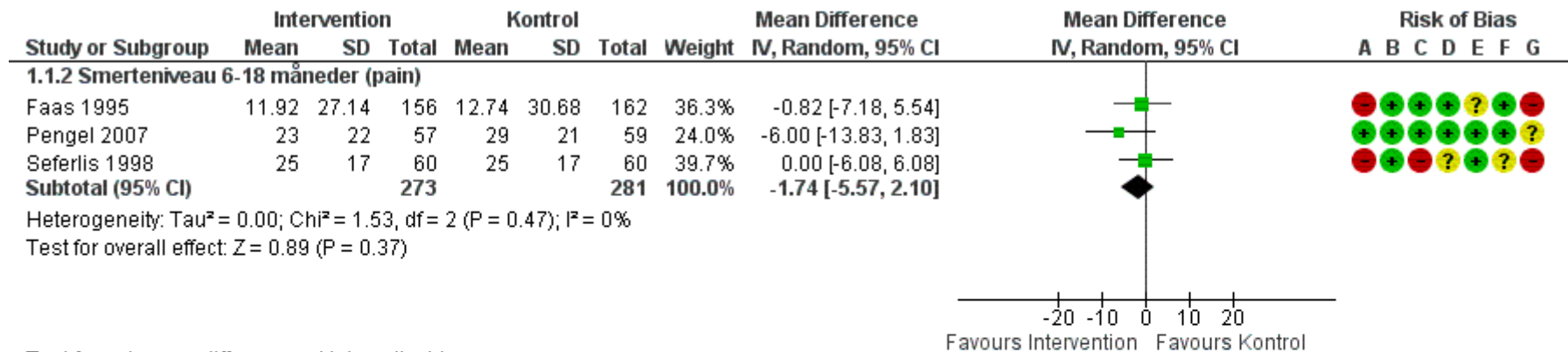
Data and analyses**1 Intervention vs Kontrol**

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Smerteniveau 6-18 måneder (Pain)	3		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.1.2 Smerteniveau 6-18 måneder (pain)	3	554	Mean Difference (IV, Random, 95% CI)	-1.74 [-5.57, 2.10]
1.2 Funktionsevne 6-18 måneder (Disability)	3		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
1.2.2 Funktionsevne 6-18 måneder (disability)	3	430	Std. Mean Difference (IV, Random, 95% CI)	-0.19 [-0.46, 0.08]
1.3 Funktionsevne 0-12 uger (Disability)	6		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
1.3.2 Funktionsevne 0-12 uger	6	678	Std. Mean Difference (IV, Random, 95% CI)	-0.25 [-0.53, 0.02]

1.4 Smerteniveau 0-12 uger (Pain)	6		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.4.2 Smerteniveau 0-12 uger (Pain)	6	802	Mean Difference (IV, Random, 95% CI)	-3.24 [-6.52, 0.04]
1.5 Frafald pga. bivirkninger	1	126	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.5.1 Frafald pga. bivirkninger (EOT)	1	126	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.6 Sygefravær, antal dage - 6-18 måneder (Sickleave, days)	2		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.6.1 Sygefravær, antal dage - 6-18 måneder (Sickleave, days)	2	327	Mean Difference (IV, Random, 95% CI)	-1.33 [-13.44, 10.79]
1.7 New Outcome	2	796	Mean Difference (IV, Fixed, 95% CI)	0.17 [-0.20, 0.53]
1.7.1 Baseline	1	126	Mean Difference (IV, Fixed, 95% CI)	-0.10 [-0.85, 0.65]
1.7.2 Baseline	1	126	Mean Difference (IV, Fixed, 95% CI)	0.90 [-0.71, 2.51]
1.7.3 Baseline	2	272	Mean Difference (IV, Fixed, 95% CI)	0.58 [-0.60, 1.76]
1.7.4 Baseline	2	272	Mean Difference (IV, Fixed, 95% CI)	0.14 [-0.32, 0.61]

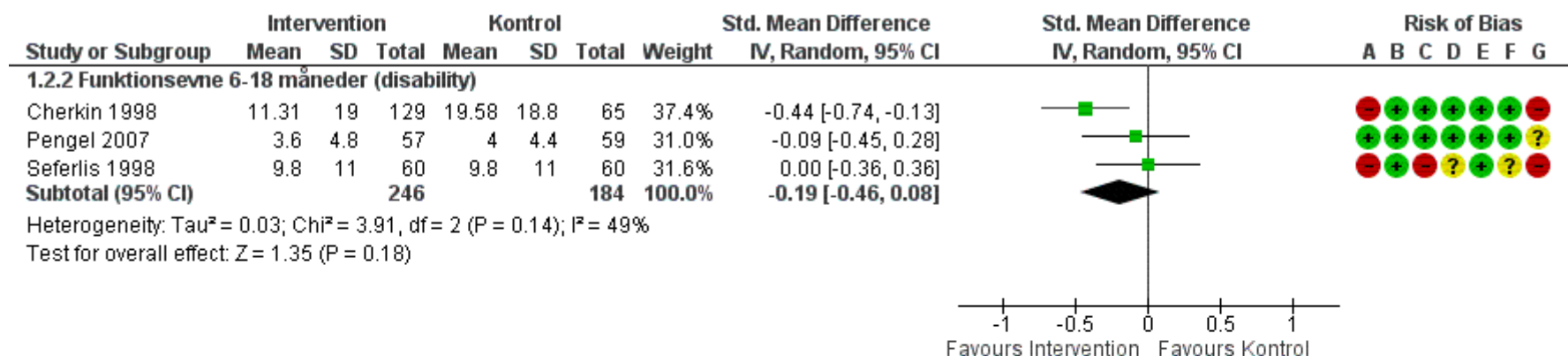
Figures

Figure 1 (Analysis 1.1)



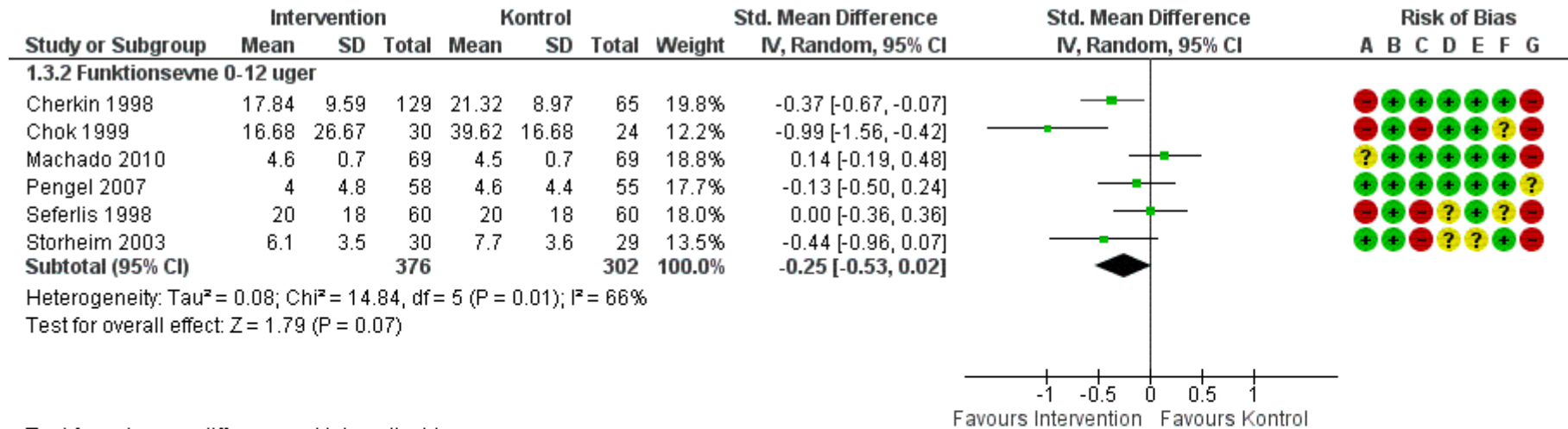
Forest plot of comparison: 1 Intervention vs Kontrol, outcome: 1.1 Smerteniveau 6-18 måneder (Pain).

Figure 2 (Analysis 1.2)



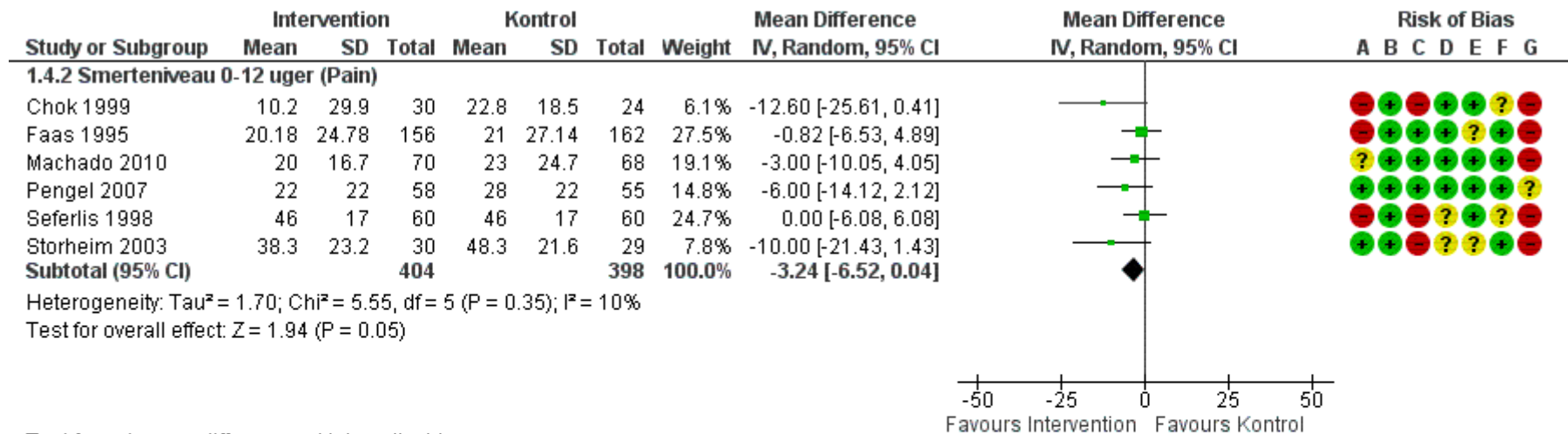
Forest plot of comparison: 1 Intervention vs Kontrol, outcome: 1.2 Funktionsevne 6-18 måneder (Disability).

Figure 3 (Analysis 1.3)



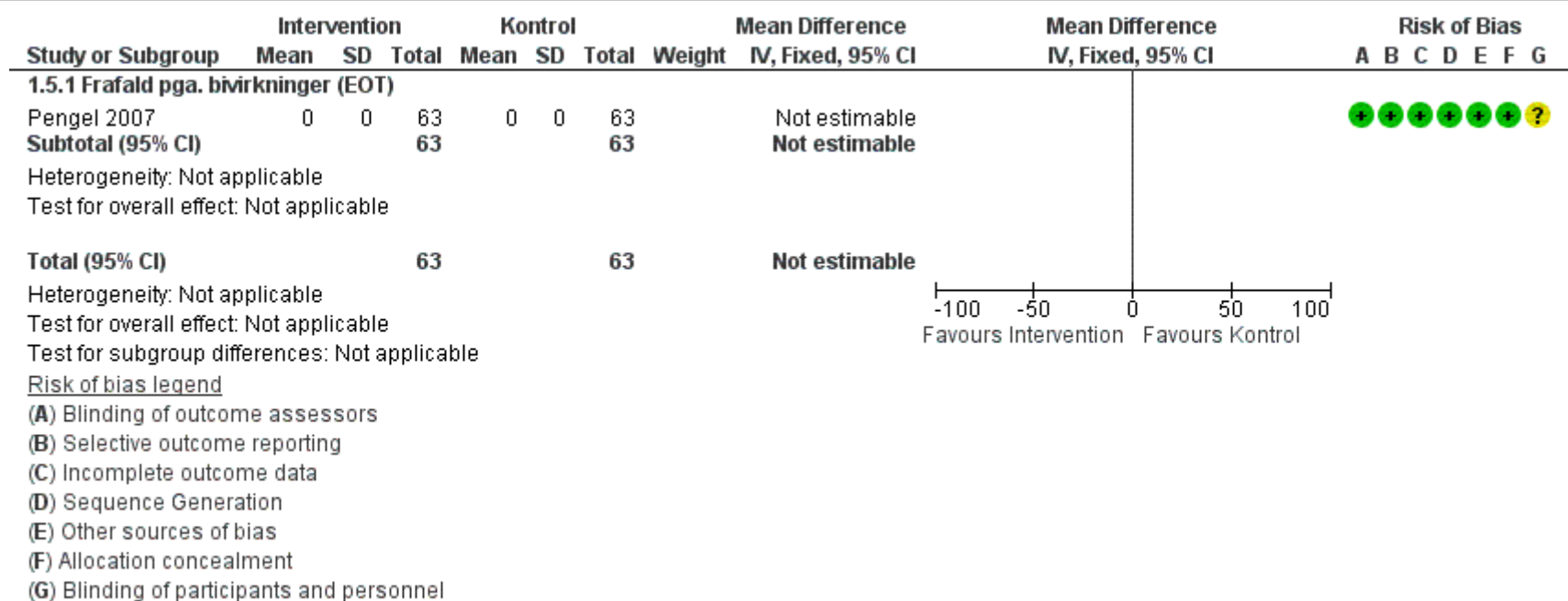
Forest plot of comparison: 1 Intervention vs Kontrol, outcome: 1.3 Funktionsevne 0-12 uger (Disability).

Figure 4 (Analysis 1.4)



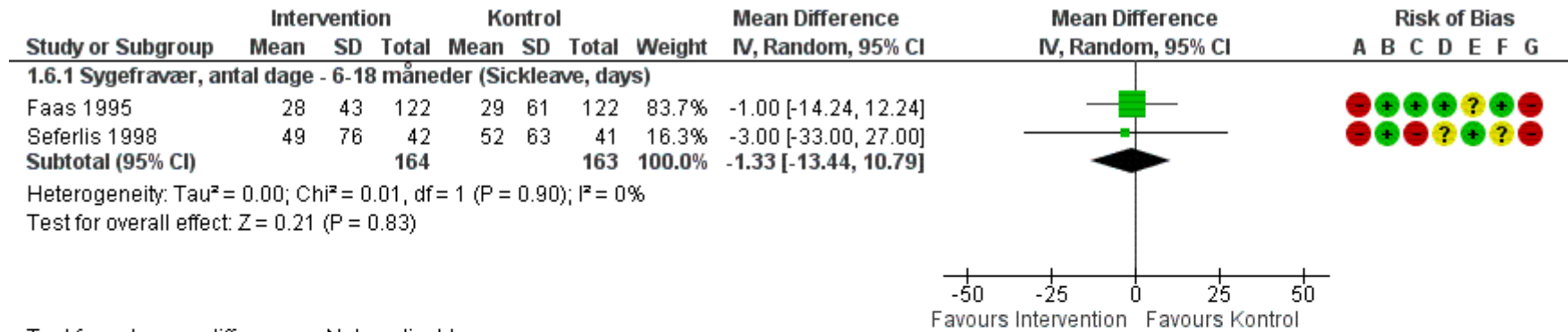
Forest plot of comparison: 1 Intervention vs Kontrol, outcome: 1.4 Smerteniveau 0-12 uger (Pain).

Figure 5 (Analysis 1.5)



Forest plot of comparison: 1 Intervention vs Kontrol, outcome: 1.5 Frafald pga. bivirkninger.

Figure 6 (Analysis 1.6)



Test for subgroup differences: Not applicable

Risk of bias legend

- (A) Blinding of outcome assessors
- (B) Selective outcome reporting
- (C) Incomplete outcome data
- (D) Sequence Generation
- (E) Other sources of bias
- (F) Allocation concealment
- (G) Blinding of participants and personnel

Forest plot of comparison: 1 Intervention vs Kontrol, outcome: 1.6 Sygefravær, antal dage - 6-18 måneder (Sickleave, days).