NKR 33 Urininkontinens, PICO 5: Bør kvinder med svær overvægt og stress urininkontinens tilbydes superviseret vægttabsprogram?

Review information

Authors

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Citation example: [Empty name], S. NKR 33 Urininkontinens, PICO 5: Bør kvinder med svær overvægt og stress urininkontinens tilbydes superviseret vægttabsprogram? Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Characteristics of studies

Characteristics of included studies

Gozukara 2014

Methods	RCT Inclusion:Urinary incontinence (min 5 episodes of UI in 3 d voiding diary) of any kind. BMI > 25 Exclusion: Medical therapy for UI within a month Attempt to weight loss within a month Urinary tract infection within 6 months Pregnancy or parturition within 6 months Previous genitourinary surgery Patients with UI due to neurological or functional origins, or with significant systemic and genitourinary medical conditions, and women who required
Participants	Characteristics: intevention/control Age: 44.1 (8.6)/ 43.8 (9.7) BMI: 32.7 (4.1)/ 32.3 (3.6)

	UUI: 34 (21%)/40 (25%) Mixed UI: 63 (39%)/ SUI: 66 (41%)/62 (39%) POP Min stg.2: 47 (29%)/ 50 (32%)
Interventions	Intervention: Et superviseret vægttabsprogram omhandlende kost og fysisk aktivitet. Kalorierestiktion 1200-1800 kcal/dgl. Månedlig fremmøde. Mål samlet vægttab 7-9% af udgangsvægt. 6 months treatment, 6 months follow up Control: Ingen. Alle (intervention + control) deltog i en fælles undervisning omhandlende vægttab, kost, motion og dets betydning for urininkontinens. 6 months treatment, 6 months follow up
Outcomes	
Identification	
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Low risk	Randomly permuted blocks
Allocation concealment	Low risk	Concealed tampered entvelopes
Blinding of participants and personnel	High risk	Not blinded
Blinding of outcome assessors	Low risk	Patients were aware of their randomazation, but oytcomes assessors were not.
Incomplete outcome data	Low risk	During follow-up, 31 (158 finished) patients in the interventiongroup and 26 (163 fineshed) in controlgroup declined to continue or dropped out.
Selective outcome reporting	Unclear risk	None detected
Other sources of bias	Unclear risk	None detected

Phelan 2012

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group **Open Label:** **Cluster RCT:**
Participants	**Baseline Characteristics** Intervention ● *Years with incontinence symptoms*: ● *Incontinence episodes /week*: ● *Type: Urge alone*: ● *Type: Mixed Urge predominate*: ● *Age*: 57.8 +/- 6.7 ● *BMI*: 36.3 +/- 6.2 ● *Type: Stress alone*: ● *Type: Mixed stress predominate*: Control ● *Years with incontinence symptoms*: ● *Incontinence episodes /week*: ● *Type: Urge alone*: ● *Type: Mixed Urge predominate*: ● *Age*: 57.8 +/- 6.7 ● *BMI*: 36.3 +/- 6.2 ● *Type: Stress alone*: ● *Type: Mixed stress predominate*: **Included criteria:** included individuals at 16 clinical centers.Eligibility criteria were age 45 to 76 years and a BMI of25 kg/m2 or greater (greater than 27 kg/m2 if currentlytaking insulin). Major exclusions included HbA1c 11%or greater, blood pressure 160/100 mm Hg or greater,triglycerides 600 mg/dl or greater, inadequate control ofcomorbid conditions, factors that may limit adherenceto the intervention, and underlying disease likely tolimit life span and/or affect safety of the interventions. **Excluded criteria:** Major exclusions included HbA1c 11% or greater, blood pressure 160/100 mm Hg or

	greater,triglycerides 600 mg/dl or greater, inadequate control ofcomorbid conditions, factors that may limit adherence to the intervention, and underlying disease likely to limit life span and/or affect safety of the interventions. For the purpose of this substudy men were also excluded.
Interventions	**Intervention Characteristics** Intervention ● *Description*: ILIwas designed to promote an average of 7% or greaterweight loss at 1 year.11 Participants were encouraged toconsume a low calorie and low fat, portion controlled dietthat included liquid meal replacements, and to achieve atleast 175 minutes of physical activity weekly. The ILIparticipants were seen weekly for the first 6 months and 3times monthly for the next 6 months for a total of 44sessions. ● *Lenght of treatment*: 1 year ● *Lenght of follow up*: None (end of treatment at 12 months ● *Supervised (yes/no)*: yes Control ● *Description*: DSE participants were invited to 3 group sessionsduring the year which focused on diet, physical activityor social support. ● *Lenght of treatment*: 1 year ● *Lenght of follow up*: None (end of treatment at 12 months ● *Supervised (yes/no)*: yes
Outcomes	*Inkontinensrelateret livskvalitet* ● **Outcome type**: ContinuousOutcome ● **Measure names**: [End of treatment, Longest FU (min 6)] ● **Reporting**: Not reported *Antal tilfælde af inkontinens/uge* ● **Outcome type**: ContinuousOutcome ● **Measure names**: [End of treatment, Longest FU (min 6)] ● **Reporting**: Not reported ● **Notes**: Number of women who had incontinensepisodes are reported in binairy outcome section *Patientoplevet effekt* ● **Outcome type**: ContinuousOutcome ● **Measure names**: [End of treatment, Longest FU (min 6)]

- **Reporting**: Not reported

Vægt

- **Outcome type**: ContinuousOutcome
- **Measure names**: [End of treatment, Longest FU (min 6)]
- **Reporting**: Partially reported
- **Data value**: Endpoint
- **Notes**: Odds ratios of any incontinence by amount of weightlost at 1 year in the women overall ( )

BMI

- **Outcome type**: ContinuousOutcome
- **Measure names**: [End of treatment, Longest FU (min 6)]
- **Reporting**: Not reported

Frafald

- **Outcome type**: DichotomousOutcome
- **Measure names**: [End of treatment, Longest FU (min 12 months)]
- **Unit of measure**: Antal
- **Direction**: Lower is better
- **Data value**: Endpoint

Antal opereret med midturethral slynge

- **Outcome type**: DichotomousOutcome
- **Measure names**: [End of treatment, Longest FU (min 12 months)]
- **Reporting**: Not reported

antal kvinder med inkontinens

- **Outcome type**: DichotomousOutcome
- **Measure names**: [End of treatment, Longest FU (min 12 months)]
- **Reporting**: Fully reported
- **Unit of measure**: antal
- **Direction**: Lower is better
- **Data value**: Endpoint

Identification	**Sponsorship source:** Supported by the Department of Health and Human Services through cooperative agreements from the National Institutes of Health DK57136,DK57149, DK56990, DK57177, DK57171, DK57151, DK57182, DK57131, DK57002, DK57078, DK57154, DK57178, DK57219, DK57008, DK57135and DK56992; the National Institute of Diabetes and Digestive and Kidney Diseases; National Heart, Lung, and Blood Institute; National Instituteof Nursing Research; National Center on Minority Health and Health Disparities; Office of Research on Women's Health; Centers for DiseaseControl and Prevention; Intramural Research Program of the National Institute of Diabetes and Digestive and Kidney Diseases; The Johns HopkinsMedical Institutions Bayview General Clinical Research Center (M01-RR-02719); the Massachusetts General Hospital Mallinckrodt General ClinicalResearch Center (M01-RR-01066); the University of Colorado Health Sciences Center General Clinical Research Center (M01 RR00051) and ClinicalNutrition Research Unit (P30 DK48520); the University of Tennessee at Memphis General Clinical Research Center (M01RR00211-40); theUniversity of Pittsburgh General Clinical Research Center (M01 RR000056 44); National Institutes of Health Grant DK 046204; University ofWashington/VA Puget Sound Health Care System Medical Research Service, Department of Veterans Affairs; and National Institute of Diabetesand Digestive and Kidney Diseases K-24 Midcareer Investigator Award in Patient Oriented Research PA-98-053 (JSB, LLS). **Country:** USA **Setting:** Clinical **Comments:** **Authors name:** Suzanne Phelan **Institution:** **Email:** **Address:**
Notes	*Jens Aaboe* on 06/08/2015 21:05 **Participants** Inclusion criteria used in this substudy: age 45 to 76 years, were not specified in the original study with Clinical Trial Registration NCT00017953. *Julie Hansen* on 06/08/2015 22:02 **Continuous Outcomes** Data on weight loss are presented in trial; see RCT when making analyses

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Unclear risk	Judgement Comment: Participants were randomly assigned within centers tothe ILI or the DSE conditions with equal probability. Randomisation method not desribed.
Allocation concealment	Unclear risk	Judgement Comment: Not described
Blinding of participants and personnel	High risk	Judgement Comment: Patients not blinded due to intervention.
Blinding of outcome assessors	Low risk	Judgement Comment: Accessors were blinded.
Incomplete outcome data	High risk	Judgement Comment: No imputation methods used (110/1385 dropped out in intervention - 145/1354 dropped out in control)
Selective outcome reporting	Low risk	Judgement Comment: None of the outcomes used in this substudy are described in the original study with clinicaltrials ID NCT00017953. All relevant outcomes reported.
Other sources of bias	Low risk	Judgement Comment: None detected;this study is a part of a large series of studies on diabetes.

Subak 2005

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group **Open Label:** **Cluster RCT:**
Participants	**Baseline Characteristics** Intervention ● *Incontinence episodes /week*: 21 (11-33) ● *Type: Urge alone*: 12% ● *Type: Mixed Urge predominate*: 38% ● *Type: Stress alone*: 12% ● *Type: Mixed stress predominate*: 38% ● *Age*: 50.5 (range 46 to 54)

	● *BMI*: 34 (32-40) ● *Years with incontinence symptoms*: 5 (2-10) Control ● *Incontinence episodes /week*: 21 (11-33) ● *Type: Urge alone*: 12% ● *Type: Mixed Urge predominate*: 38% ● *Type: Stress alone*: 12% ● *Type: Mixed stress predominate*: 38% ● *Age*: 50.5 (range 46 to 54) ● *BMI*: 34 (32-40) ● *Years with incontinence symptoms*: 5 (2-10) **Included criteria:** Women 18 to 80 years old with BMI between 25 and 45 kg/m2, urinary incontinence for at least 3 months and at least 4 incontinent episodes in a 7-day urinary diary. Prior incontinence therapies (including surgery) were not exclusions from the study eligibility. Participants currently using incontinence therapy were included in the study but were asked to not change treatment during study. **Excluded criteria:** Exclusion criteria included pregnancy, urinary tract infection, significant medical condition, pelvic cancer, neurological condition possibly associated with incontinence, interstitial cystitis or potential inability to complete the study.
Interventions	**Intervention Characteristics** Intervention ● *Description*: Intervention. The weight reduction intervention was a 3month intensive group based medical and behavioral weight loss program. Participants were placed on a standard low calorie liquid diet (800 kcals per day or less), encouraged to increase physical activity gradually until they were exercising 60 minutes daily, and were taught standard cognitive and behaviorale skills to assist in modifying eating and exercise habits. Participants met weekly in group sessions led by a nutritionist, exercise physiologist or behavioral therapist and followed a structured protocol. ● *Lenght of treatment*: 3 month ● *Lenght of follow up*: 6 month, but without a control group as they got treatment after end of treatment of the intervention group. ● *Supervised (yes/no)*: yes Control

	● *Description*: Women in the wait-list control group had no intervention for 3 months and then entered the weight reduction program. ● *Lenght of treatment*: 3 month ● *Lenght of follow up*: ● *Supervised (yes/no)*:
Outcomes	*Inkontinensrelateret livskvalitet* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 6)"] ● **Reporting**: Fully reported ● **Scale**: IIQ Incontinence Impact Questionnaire ● **Range**: 0 to 400 ● **Unit of measure**: Points ● **Direction**: Lower is better ● **Data value**: Endpoint *Antal tilfælde af inkontinens/uge* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 6)"] ● **Reporting**: Fully reported ● **Unit of measure**: Weekly episodes ● **Direction**: Lower is better ● **Data value**: Endpoint *Patientoplevet effekt* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 6)"] ● **Reporting**: Not reported *Vægt* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 6)"] ● **Reporting**: Fully reported ● **Unit of measure**: Kg ● **Direction**: Lower is better

	● **Data value**: Endpoint *BMI* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 6)"] ● **Reporting**: Partially reported ● **Unit of measure**: Kg/m2 ● **Direction**: Lower is better ● **Data value**: Endpoint *Frafald* ● **Outcome type**: DichotomousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 12 months)"] ● **Reporting**: Fully reported ● **Direction**: Lower is better ● **Data value**: Endpoint *Antal opereret med midturethral slynge* ● **Outcome type**: DichotomousOutcome ● **Measure names**: ["End of treatment", "Longest FU (min 12 months)"] ● **Reporting**: Not reported ● **Direction**: Lower is better
Identification	**Sponsorship source:** Supported by research awards from Mount Zion Health Services, Inc. and the University of California, San Francisco Academic Senate, Committee on Research. **Country:** USA **Setting:** **Comments:** **Authors name:** Subak 2005 **Institution:** **Email:** **Address:**

Notes	*Britta Tendal* on 09/07/2015 23:28 **Continuous Outcomes** In the paper most outcomes are given as median and IQR. The median is used as a mean and the IQR/1.35 is used as the SD

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Low risk	Women were then randomized to either intervention or control by stratification to UI condition.
Allocation concealment	Low risk	Sealed, opaque envelopes numbered consecutively
Blinding of participants and personnel	Unclear risk	Not blinded
Blinding of outcome assessors	Unclear risk	Not blinded
Incomplete outcome data	High risk	5/24 in the intervention group were excluded from the analysis and 3/24 in the control group were excluded from the analysis due to medical exklusion, lost to follow-up (2 and 2), missing primary outcome and 1 withdrew (control).
Selective outcome reporting	Low risk	Presented outcomes reported. No protocol located.
Other sources of bias	Low risk	Nothing detected

Subak 2009

Methods	**Study design:** Randomized controlled trial **Study grouping:** Parallel group **Open Label:** **Cluster RCT:**

Participants	**Baseline Characteristics** Intervention ● *Age*: 53±11 ● *Years with incontinence symptoms*: ● *Incontinence episodes /week*: 24±18 ● *Type: Urge alone*: 33 (14.6) ● *Type: Stress alone*: 8 (3.5) ● *BMI*: 36±6 ● *Type: Urge Predominant*: 71 (31.4) ● *Type: Stress Predominant*: 36 (15.9) ● *Type Mixed no predominant*: 78 (34.5) Control ● *Age*: 53±11 ● *Years with incontinence symptoms*: ● *Incontinence episodes /week*: 24±18 ● *Type: Urge alone*: 33 (14.6) ● *Type: Stress alone*: 8 (3.5) ● *BMI*: 36±6 ● *Type: Urge Predominant*: 71 (31.4) ● *Type: Stress Predominant*: 36 (15.9) ● *Type Mixed no predominant*: 78 (34.5) **Included criteria:** Women were eligible for the study if they were at least 30 years of age, had a body-mass index of 25 to 50, and at baseline reported 10 or more urinary-incontinence episodes in a 7-day diary of voiding. The participants were required to monitor their food intake and physical activity for 1 week, to be able to walk unassisted for two blocks (approximately 270 m) without stopping, and to agree not to initiate new treatments for incontinence or weight reduction for the duration of the study. **Excluded criteria:** use of medical therapy for incontinenceor weight loss within the previous month, currenturinary tract infection or four or more urinarytract infections in the previous year, a history ofincontinence of neurologic or functional origin(due to factors not involving the lower urinarytract, such as chronic impairment of physical orcognitive functioning), previous surgery for incontinenceor urethral surgery, major medical orgenitourinary tract conditions, pregnancy or parturitionin the previous 6 months, type 1 or type 2diabetes mellitus requiring medical therapy thatincreased the risk of hypoglycemia, and uncontrolledhypertension.

Interventions	**Intervention Characteristics** Intervention ● *Description*: The weight-loss program was designed to producean average loss of 7 to 9% of initial bodyweight within the first 6 months of the programand was modeled after that used in the followingtwo large clinical trials: Look AHEAD (Actionfor Health in Diabetes),18,19 a lifestyle interventiontrial intended to achieve and maintain weight lossin patients with diabetes, and the Diabetes PreventionProgram.20 The participants in the weightlossprogram met weekly for 6 months in groupsof 10 to 15 for 1-hour sessions that were led byexperts in nutrition, exercise, and behavior changeand were based on a structured protocol. Theparticipants were given a standard reduced-caloriediet (1200 to 1500 kcal per day), with a goal ofproviding no more than 30% of the calories from fat. To improve adherence, the participants wereprovided with sample meal plans and were givenvouchers for a meal-replacement product (Slim-Fast) to be used for two meals a day duringmonths 1 to 4 and for one meal a day thereafter.The participants were encouraged to graduallyincrease physical activity (brisk walking or activitiesof similar intensity) until they were active forat least 200 minutes each week. Behavioral skills,including self-monitoring, stimulus control, andproblem-solving, were emphasized. ● *Lenght of treatment*: 6-month ● *Lenght of follow up*: End of treatment (6-month) ● *Supervised (yes/no)*: Yes Control ● *Description*: Women assigned to the control group werescheduled to participate in four education sessionsat months 1, 2, 3, and 4. During these1-hour group sessions, which included 10 to 15women, general information was presented aboutweight loss, physical activity, and healthful eatinghabits, according to a structured protocol. ● *Lenght of treatment*: 6-month ● *Lenght of follow up*: End of treatment (6-month) ● *Supervised (yes/no)*: Yes
Outcomes	*Inkontinensrelateret livskvalitet* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", ""] ● **Reporting**: Not reported *Any Antal tilfælde af inkontinens/uge* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", ""]

- **Direction**: Lower is better
- **Data value**: Endpoint

Patientoplevet effekt

- **Outcome type**: ContinuousOutcome
- **Measure names**: ["End of treatment", ""]
- **Reporting**: Partially reported
- **Notes**: Number of moderately or very satisfied with change in incontinence inintervention group: 166 (75.8) control group: 44 (46.8)

Vægt

- **Outcome type**: ContinuousOutcome
- **Measure names**: ["End of treatment", ""]
- **Reporting**: Fully reported
- **Unit of measure**: kg
- **Direction**: Lower is better
- **Data value**: Endpoint

BMI

- **Outcome type**: ContinuousOutcome
- **Measure names**: ["End of treatment", ""]
- **Reporting**: Not reported

Frafald

- **Outcome type**: DichotomousOutcome
- **Measure names**: ["End of treatment", "Longest FU (min 12 months)"]

Antal opereret med midturethral slynge

- **Outcome type**: DichotomousOutcome
- **Measure names**: ["End of treatment", "Longest FU (min 12 months)"]

Stress incontinence

- **Outcome type**: ContinuousOutcome
- **Measure names**: ["End of treatment", ""]
- **Reporting**: Fully reported
- **Scale**: Continous

	● **Direction**: Lower is better ● **Data value**: Endpoint *Urge incontinence* ● **Outcome type**: ContinuousOutcome ● **Measure names**: ["End of treatment", ""] ● **Reporting**: Fully reported ● **Scale**: Continous ● **Direction**: Lower is better ● **Data value**: Endpoint
Identification	**Sponsorship source:** Supported by grants from the National Institute of Diabetesand Digestive and Kidney Diseases (NIDDK) (U01 DK067860,U01 DK067861, and U01 DK067862) and from the Office of Researchon Women's Health.Dr. Subak reports serving on an advisory board for Pfizer andreceiving grant support from Pfizer; Dr. Grady, receiving grantsupport from Bionovo; Dr. Kusek, owning stock in Eli Lilly, Pfizer,and deCODE Genetics; and Dr. Burgio, serving on an advisoryboard for Pfizer, receiving grant support from Pfizer, and receivingadvisory-board fees from Astellas and GlaxoSmithKline. No otherpotential conflict of interest relevant to this article was reported **Country:** USA **Setting:** **Comments:** **Authors name:** Subak et al **Institution:** **Email:** **Address:**
Notes	*Julie Hansen* on 04/08/2015 21:11 **Continuous Outcomes** Mean difference Change values are presented in results section i RCT for 'weight'; *Julie Hansen* on 04/08/2015 21:24 **Dichotomous Outcomes** Dropout are presented for 'number who returned status on incontinens episodes'; as this is our critical outcome

Risk of bias table

Bias	Authors' judgement	Support for judgement
Sequence Generation	Low risk	Judgement Comment: Randomizationwas performed with the use of randomlypermuted blocks of three or six, stratifiedaccording to clinical center, with random assignmentconcealed in tamper-proof envelopes.Low risk due to stratified randomization
Allocation concealment	Low risk	Judgement Comment: with random assignmentconcealed in tamper-proof envelopes.
Blinding of participants and personnel	Unclear risk	unclear
Blinding of outcome assessors	Unclear risk	unclear
Incomplete outcome data	Low risk	Judgement Comment: Attrition is common in weightloss studies; data was imputet by miltuple-imputation methods
Selective outcome reporting	Low risk	Judgement Comment: All wanted oucomes were presented; protocol published in clin.trials.gov
Other sources of bias	Low risk	

Footnotes

References to studies

Included studies

Gozukara 2014

[Empty]

Phelan 2012

Phelan,S.; Kanaya,A. M.; Subak,L. L.; Hogan,P. E.; Espeland,M. A.; Wing,R. R.; Burgio,K. L.; DiLillo,V.; Gorin,A. A.; West,D. S.; Brown,J. S.; Look AHEAD Research,Group. Weight loss prevents urinary incontinence in women with type 2 diabetes: results from the Look AHEAD trial.. Journal of Urology 2012;187(3):939-944. [DOI: http://dx.doi.org/10.1016/j.juro.2011.10.139]

Subak 2005

Subak LL; Whitcomb E; Shen H; Saxton J; Vittinghoff E; Brown JS. Weight loss: a novel and effective treatment for urinary incontinence.. Journal of Urology 2005;174(1):190-195. [DOI: S0022-5347(05)60065-1 [pii]]

Subak 2009

Subak,L. L.; Wing,R.; West,D. S.; Franklin,F.; Vittinghoff,E.; Creasman,J. M.; Richter,H. E.; Myers,D.; Burgio,K. L.; Gorin,A. A.; Macer,J.; Kusek,J. W.; Grady,D.; PRIDE Investigators. Weight loss to treat urinary incontinence in overweight and obese women. The New England journal of medicine 2009;360(5):481-490. [DOI: 10.1056/NEJMoa0806375 [doi]]

Excluded studies

Ahroni 2005

Ahroni,J. H.; Montgomery,K. F.; Watkins,B. M.. Laparoscopic adjustable gastric banding: weight loss, co-morbidities, medication usage and quality of life at one year. Obesity Surgery 2005;15(5):641-647. [DOI: 10.1381/0960892053923716 [doi]]

AllingMoller 2000

Alling Moller,L.; Lose,G.; Jorgensen,T.. Risk factors for lower urinary tract symptoms in women 40 to 60 years of age. Obstetrics and gynecology 2000;96(3):446-451. [DOI: S0029-7844(00)00915-7 [pii]]

Asplund 2004

Asplund, R.; Aberg, H. E.. Nocturia in relation to body mass index, smoking and some other life-style factors in women. Climacteric : the journal of the International Menopause Society 2004;7(3):267-73. [DOI:]

Auwad 2008

Auwad,W.; Steggles,P.; Bombieri,L.; Waterfield,M.; Wilkin,T.; Freeman,R.. Moderate weight loss in obese women with urinary incontinence: a prospective longitudinal study. International urogynecology journal and pelvic floor dysfunction 2008;19(9):1251-1259. [DOI: 10.1007/s00192-008-0616-9 [doi]]

Bradley 2005

Bradley,C. S.; Kennedy,C. M.; Nygaard,I. E.. Pelvic floor symptoms and lifestyle factors in older women. Journal of women's health (2002) 2005;14(2):128-136. [DOI: 10.1089/jwh.2005.14.128 [doi]]

Brown 2006

Brown,J. S.; Wing,R.; Barrett-Connor,E.; Nyberg,L. M.; Kusek,J. W.; Orchard,T. J.; Ma,Y.; Vittinghoff,E.; Kanaya,A. M.; Diabetes Prevention Program Research,Group. Lifestyle intervention is associated with lower prevalence of urinary incontinence: the Diabetes Prevention Program.. Diabetes care 2006;29(2):385-390. [DOI: 29/2/385 [pii]]

Bump 1992

Bump,R. C.; Sugerman,H. J.; Fantl,J. A.; McClish,D. K.. Obesity and lower urinary tract function in women: effect of surgically induced weight loss. American Journal of Obstetrics and Gynecology 1992;167(2):392-7; discussion 397-9. [DOI:]

Burgio 1991

Burgio,K. L.; Matthews,K. A.; Engel,B. T.. Prevalence, incidence and correlates of urinary incontinence in healthy, middle-aged women. The Journal of urology 1991;146(5):1255-1259. [DOI:]

Dallosso 2003

Dallosso,H. M.; McGrother,C. W.; Matthews,R. J.; Donaldson,M. M.; Leicestershire MRC Incontinence Study Group. The association of diet and other lifestyle factors with overactive bladder and stress incontinence: a longitudinal study in women. BJU international 2003;92(1):69-77. [DOI: 4271 [pii]]

Deitel 1988

Deitel, M.; Stone, E.; Kassam, H. A.; Wilk, E. J.; Sutherland, D. J.. Gynecologic-obstetric changes after loss of massive excess weight following bariatric surgery. Journal of the American College of Nutrition 1988;7(2):147-53. [DOI:]

Hannestad 2003

Hannestad,Y. S.; Rortveit,G.; Daltveit,A. K.; Hunskaar,S.. Are smoking and other lifestyle factors associated with female urinary incontinence? The Norwegian EPINCONT Study. BJOG : an international journal of obstetrics and gynaecology 2003;110(3):247-254. [DOI: S1470032802029270 [pii]]

Nygaard 1997

Nygaard, I. E.. Does prolonged high-impact activity contribute to later urinary incontinence? A retrospective cohort study of female Olympians. Obstetrics & Gynecology 1997;90(5):718-22. [DOI: S0029-7844(97)00436-5 [pii]]

Roe 1999

Roe, B.; Doll, H.. Lifestyle factors and continence status: comparison of self-report data from a postal survey in England. Journal of wound, ostomy, and continence nursing : official publication of The Wound, Ostomy and Continence Nurses Society / WOCN 1999;26(6):312-313, 315-319. [DOI:]

Song 2005

Song, Y. F.; Zhang, W. J.; Song, J.; Xu, B.. Prevalence and risk factors of urinary incontinence in Fuzhou Chinese women. Chinese Medical Journal 2005;118(11):887-92. [DOI:]

Subak 2002

Subak,L. L.; Johnson,C.; Whitcomb,E.; Boban,D.; Saxton,J.; Brown,J. S.. Does weight loss improve incontinence in moderately obese women? International urogynecology journal and pelvic floor dysfunction 2002;13(1):40-43. [DOI:]

Data and analyses

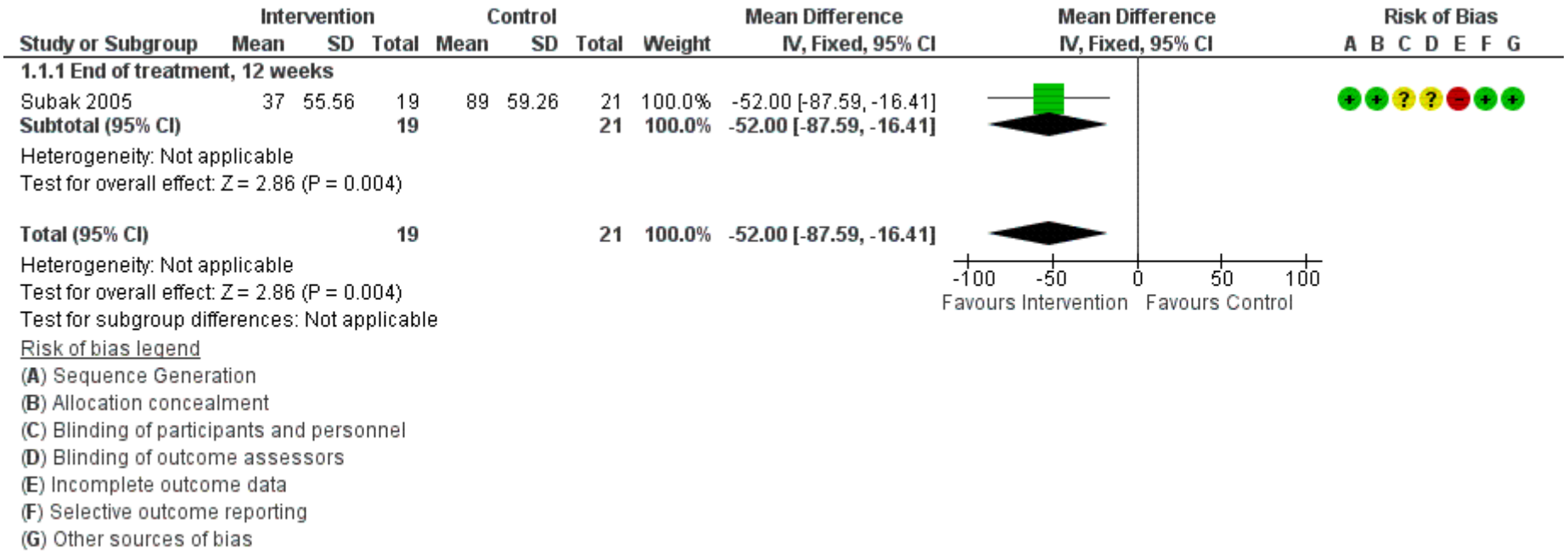
1 Intervention vs Control

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Inkontinensrelateret livskvalitet	1	40	Mean Difference (IV, Fixed, 95% CI)	-52.00 [-87.59, -16.41]
1.1.1 End of treatment, 12 weeks	1	40	Mean Difference (IV, Fixed, 95% CI)	-52.00 [-87.59, -16.41]
1.2 Antal tilfælde af inkontinens/uge	3	699	Mean Difference (IV, Random, 95% CI)	-4.42 [-6.83, -2.02]
1.2.1 End of treatment, 3-6 months	3	699	Mean Difference (IV, Random, 95% CI)	-4.42 [-6.83, -2.02]
1.3 Patientoplevet effekt	1	321	Mean Difference (IV, Fixed, 95% CI)	-1.70 [-2.28, -1.12]
1.3.1 End of treatment, 6 months	1	321	Mean Difference (IV, Fixed, 95% CI)	-1.70 [-2.28, -1.12]
1.4 Vægt	3	699	Mean Difference (IV, Random, 95% CI)	-7.05 [-10.63, -3.48]
1.4.1 End of treatment, 12 weeks	3	699	Mean Difference (IV, Random, 95% CI)	-7.05 [-10.63, -3.48]
1.5 BMI	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.6 Stress incontinence	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.7 Urge incontinence	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.8 Antal tilfælde af inkontinens/uge	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable

1.9 Frafald	4	3758	Risk Ratio (IV, Random, 95% CI)	0.67 [0.40, 1.11]
1.9.1 End of treatment, 3-12 months	4	3758	Risk Ratio (IV, Random, 95% CI)	0.67 [0.40, 1.11]
1.10 Antal opereret med midturethral slynge	0		Risk Ratio (IV, Fixed, 95% CI)	No totals

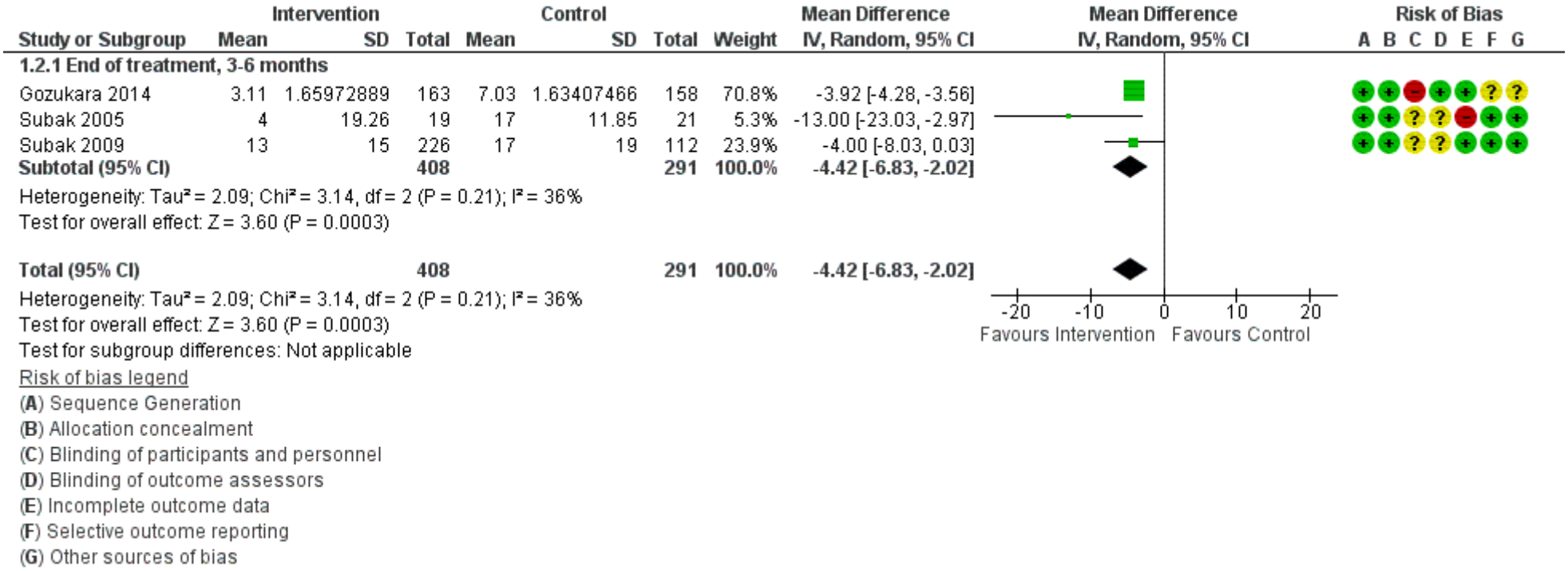
Figures

Figure 1 (Analysis 1.1)



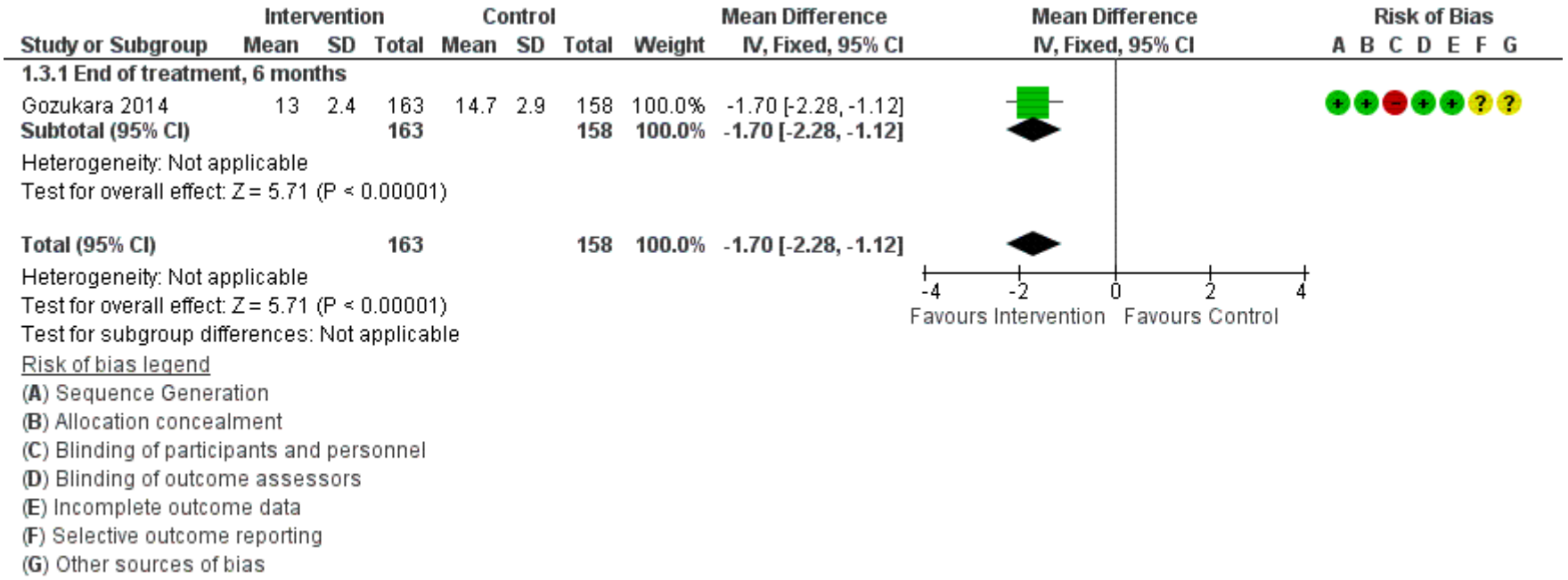
PICO 5: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.1 Inkontinensrelateret livskvalitet.

Figure 2 (Analysis 1.2)



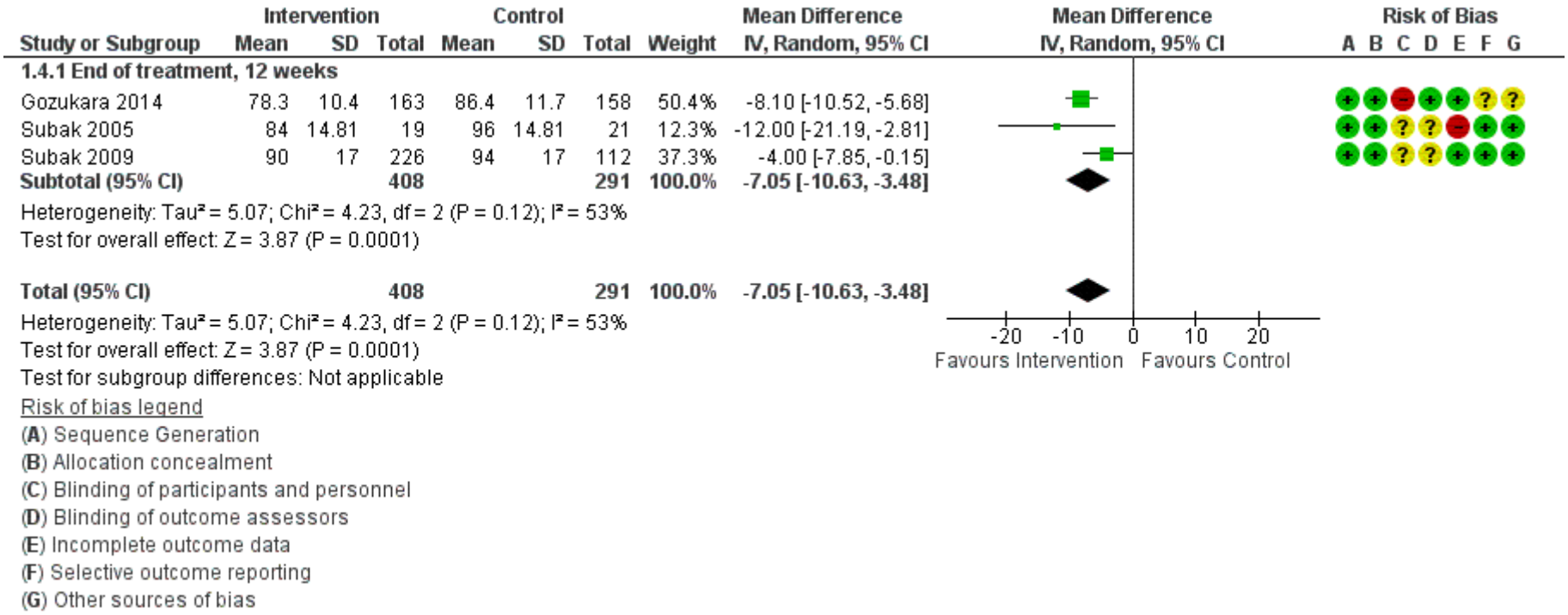
PICO 5: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.2 Any Antal tilfælde af inkontinens/uge.

Figure 3 (Analysis 1.3)



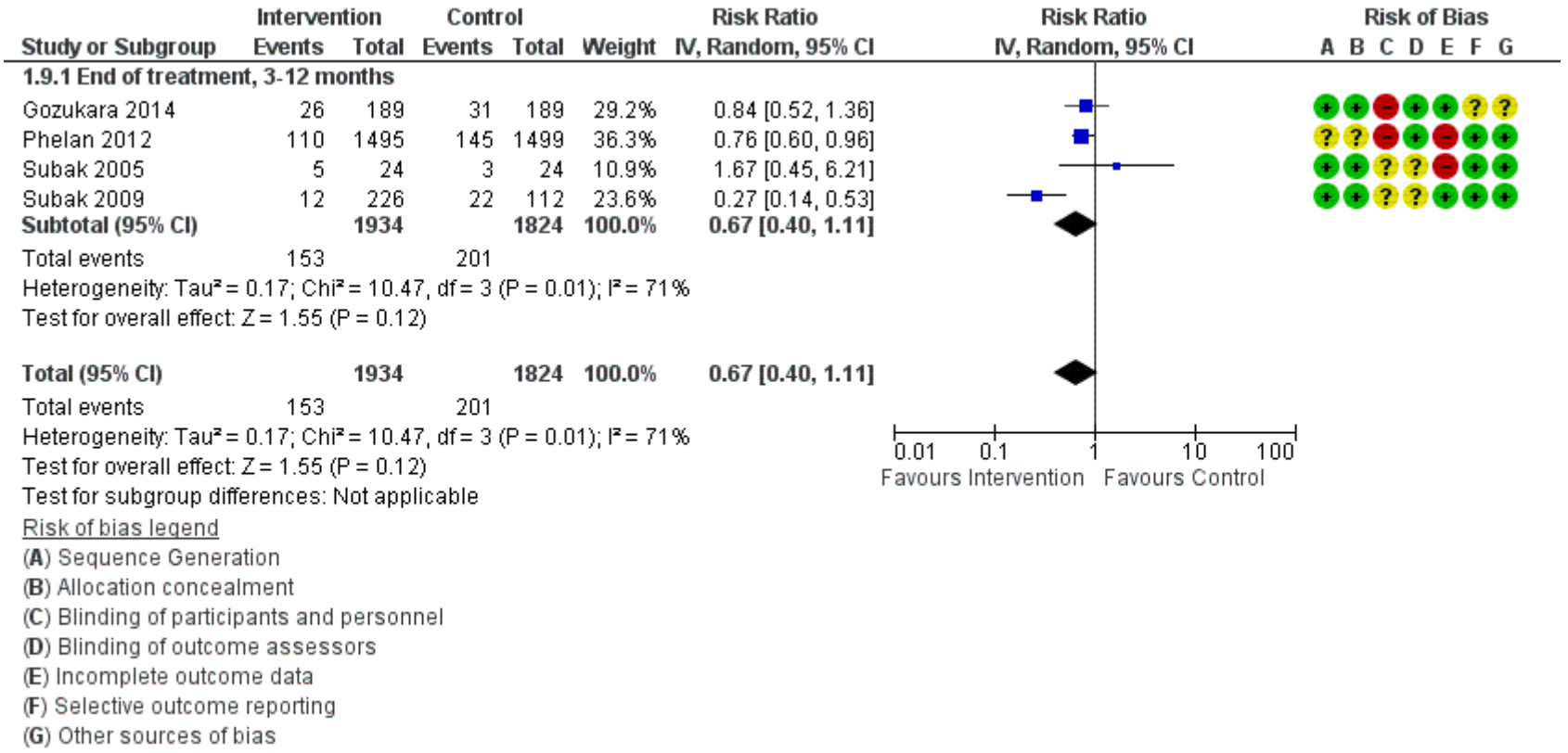
PICO 5: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.3 Patientoplevet effekt.

Figure 4 (Analysis 1.4)



PICO 5: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.4 Vægt.

Figure 5 (Analysis 1.9)



PICO 5: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.9 Frafald.