Evidence tables for review question: What is the effectiveness of pelvic floor muscle training (including Kegel exercises, biofeedback, weighted vaginal cones, and electrical stimulation) for improving symptoms of pelvic floor dysfunction?

Table 5: Evidence tables for included systematic reviews

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Dumoulin, C., Cacciari, L. P., Hay-Smith, E. J. C., Pelvic floor muscle training versus no treatment, or inactive control treatments, for urinary incontinence in women, Cochrane Database of Systematic Reviews, 2018 **Ref Id** 938956 **Country/ies where the study was carried out** Canada **Study type**	**Sample size** 31 studies N=1817 women Sample sizes ranged from 15-143 participants per studies **Characteristics** All women had UI. Fifteen trials diagnosed the type of UI based on symptoms or signs, or both, thirteen were based on urodynamic diagnoses, one was based on either, and two were unclear. In total, there were 18 SUI studies, one MUI, one UUI, and 9 with a range of UI diagnoses The ages of included participants ranged from 13 to 70+ years.	**Interventions** PFMT versus no treatment, placebo or sham treatments, or other inactive control treatments Three trials gave no information of the PFMT programme used. Two trials had PFMT programmes that clearly or predominantly targeted co-ordination or strength training. Others were difficult to categorise because they were either mixed (strength and endurance) or the key training parameter was not described. Many described a programme of short or short and rapid contractions of one to three seconds and long sustained contractions	**Details** Meta-analyses were conducted where data were available from more than one study assessing the same outcome, using a fixed effect model. Continuous variables used means and SDs to calculate an MD and 95% CI, dichotomous outcomes used the numbers reporting an outcome and the number at risk to calculate a RR and 95% CI	**Results** **Participant perceived cure after treatment** SUI 4 studies, 165 participants, RR 8.38 (3.68, 19.07) UI (all types) 3 studies, 290, RR 5.34 (2.78, 10.26) **Participant perceived cure or improvement after treatment** SUI 3 studies, 242 participants, RR 6.33 (3.88, 10.33) UI (all types) 2 studies, 166 participants, RR 2.39 (1.64, 3.47) **UI specific symptom measures (Kings Health Questionnaire/severity measure after treatment)** SUI 3 studies, 145 participants, MD-13.14 (-21.10, -5.18)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: women with UI and diagnosed as having SUI, UUI or MUI on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists 2. Intervention: One arm of all eligible trials included a PFMT programme to ameliorate symptoms of existing urine leakage 3. Comparison: no treatment arm, a placebo treatment arm, a sham treatment arm (for example sham electrical

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic review **Aim of the study** To assess the effects of PFMT for women with UI in comparison to no treatment, placebo or sham treatments, or other inactive control treatments; and summarise the findings of relevant economic evaluations **Study dates** The date of the last search was 12 February 2018 **Source of funding** Supported by the NIHR, the primary author was funded by the Canadian Research Chair of the Canadian	**Inclusion criteria** Types of studies: • RCTs • Quasi-randomised trials Types of participants • Women with UI and diagnosed as having SUI, UUI or MUI, defined by trialists Types of interventions and comparisons • One arm must include PFMT to ameliorate symptoms of urine leakage • Another arm of the trial was a no treatment arm, a placebo treatment arm, a sham treatment arm (for example sham electrical stimulation) or an inactive control treatment arm (for example advice on the use of pads) • PFMT included using variations in the purpose and timing of PFMT (for example PFMT for	of 6 to 59 seconds, in addition to contraction prior to and during a cough, or prior to an abdominal strain, and in different body positions. The training programme was progressive in 14 trials, increasing the difficulty of the exercise week by week, including body position or number of repetitions, or holding time Control interventions included • No treatment (19 studies) • Placebo drug (1 study) • Sham electrical stimulation (1 study) Other inactive control treatments including an anti-incontinence device (1 study), advice on incontinence pads (1 study), motivational phone calls (1 study), advice on lifestyle alterations (1 study), general education (2 studies), refraining from special exercises (1 study), access to an		[fixed effects]; -13.44 (-32.44, 5.35) [random effects] **UI specific symptom measures (Kings Health Questionnaire/physical limitation)** SUI 3 studies, 145 participants, MD-11.89 (-20.55, -3.23) **Quality of life measures (Kings Health Questionnaire/general health score)** SUI 3 studies, 145 participants, MD 1.81 (-3.40, 7.03) **Urinary incontinence-specific symptom measures (Incontinence Modular Questionnaire Urinary Incontinence short form)** SUI 3 studies, 196 participants, MD -3.45 (-4.39, -2.52) MUI 1 study, 12 participants, MD -3.97 (-7.85, -0.09) **Urinary incontinence-specific quality of life measures (Incontinence Impact Questionnaire short form)**	stimulation) or an inactive control treatment arm (for example advice on the use of pads). 4. Outcomes: Participant-reported measures (symptomatic cure of UI at the end of treatment; symptomatic cure or improvement of UI at the end of treatment; symptom- and condition-specific QoL measures), participant reported outcomes (Longer-term symptomatic cure and improvement; satisfaction; need for further treatment; self-efficacy), Participant-reported quantification of symptoms, clinicians measures, quality of life, adverse effects, measures of likely moderator variables, measures of PFM function, adherence **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is mention

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Institute of Health Rsearch	strengthening, and PFMT for urge suppression), different ways of teaching PFMT, types of contractions (fast or sustained), and n umber of contractions • Trials that combined PFMT with a single episode of biofeedback or advice on strategies for symptoms were included Types of outcomes There were 5 outcome categories, including: • the woman's observations (symptoms) • quantification of symptoms (for example urine loss) • the clinician's observations (anatomical and functional) • quality of life (QoL) • socioeconomic measures **Exclusion criteria** • Any other type of controlled clinical trial	education pamphlet (2 studies)		SUI 1 study, 35 participants, MD -19.7 (-30.63, -8.77) UI (all types) 2 studies, 176 participants, MD -7.54 (-14.7, -0.39) **Participant perceived satisfaction** SUI 2 studies, 105 participants, RR 5.32 (2.63, 10.74) UI (all types) 1 study, 108 participants, RR 2.77 (1.74, 4.41) Outcomes not meta-analysed ('totals not selected') **Urinary incontinence-specific quality of life measures (Incontinence Modular Questionnaire Lower Urinary Tract Symptoms Quality of Life)** SUI 1 study, 118 participants, MD -5.3 (-7.66, -2.94) **Urinary incontinence-specific symptom measures (Urinary Distress Inventory short form)** SUI 1 study, 35 participants, MD -16 (-29.81, -2.19)	of a protocol and differences between the protocol and review are reported 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Probably yes - Restrictions included women with UI whose symptoms might be due to significant factors outside the urinary tract, nocturnal enuresis, antenatal/postnatal women. Justifications for most of these were provided 1.5 Yes - No restrictions on language **Domain 2: Identification and selection of studies: Low** 2.1 Yes - the Cochrane Incontinence Specialised Register, which contains trials from CENTRAL, MEDLINE, MEDLINE In-Process, MEDLINE Epub

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Women with UI whose symptoms might be due to significant factors outside the urinary tract (for example neurological disorders, cognitive impairment, lack of independent mobility and cancer or radiotherapy) • Women with nocturnal enuresis • Antenatal or postnatal women specifically • Studies including only asymptomatic women doing PFMT for prevention of UI Combination of PFMT with another conservative therapy or drug therapy			UI (all types) 1 study, 121 participants, MD -7.1 (-10.08, -4.12) **Urinary incontinence-specific quality of life measures (Incontinence Impact Questionnaire long form)** UI (all types) 1 study, 48 participants, MD -52.67 (-95, -10.34) **Urinary incontinence-specific quality of life measures (Incontinence of Quality of Life questionnaire)** SUI 1 study, 50 participants, MD -24.6 (-37.75, -11.45) UI (all types) 1 study, 34 participants, MD -28.93 (-35.12, -22.74) **Participant-perceived cure at up to 1 year** UI (all types) 1 study, 120 participants, RR 23.78 (3.32, 170.49) **Participant-perceived cure or improvement at up to 1 year** SUI 1 study, 51 participants, RR 27.93 (1.75, 444.45)	Ahead of Print, ClinicalTrials.gov, WHO ICTRP, UK Clinical Research Network Portfolio, and handsearching of journals and conference proceedings. 2.2 Yes - reviewers cross-referenced relevant conference abstracts identified from the Cochrane Incontinence Specialised Register search to determine if a full-length report had been published and checked the reference lists of included trials 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on language 2.5 Yes - To review authors independently screened the list of titles and abstracts. Two review authors then independently assessed full test articles/abstracts. Any differences of opinion were resolved by discussion or involvement of a third party

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Urinary incontinence-specific symptom measures at 1 year (Urinary Distress Inventory long form) UI (all types) 1 stuyd, 48 participants, MD -38.58 (-67.61, -9.55) **Urinary incontinence-specific quality of life measures at 1 year (Incontinence Impact Questionnaire long form)** UI (all types) 1 study, 48 participants, MD -41.91 (-83.2, -0.62) **Perception of improvement (visual analogue scale)** UI (all types) 1 study, 55 participants, MD 7.3 (6.84, 7.76)	**Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Two review authors independently undertook data extraction, which was cross-checked by a third review author. Any differences of opinion related to the data extraction were resolved by discussion 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Yes - For categorical outcomes, the necessary data was the numbers reporting an outcome and the numbers at risk in each group to derive a risk ratio with 95% confidence intervals. For continuous variables, means and standard deviations were needed to derive mean differences and 95% CIs. Where study data were possibly collected but not reported, or data were reported in a form that could not be used in the formal comparisons, reviewers sought further clarification

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					from the trialists. If this was not possible, the reviewers used the most detailed numerical data available to calculate the actual numbers or means and SDs 3.4 Yes - quality assessed using the Cochrane 'Risk of bias' assessment tool 3.5 Yes - Two review authors independently assessed these domains, which another review author cross-checked. Any differences of opinion were resolved by consensus. **Domain 4: Synthesis and findings: Low** 4.1 Yes - all included studies provide results in the outcome tables 4.2 Yes - the section on differences between protocol and review makes no mention of differences to analyses. 4.3 Probably yes - meta-analysis was done where appropriate. A fixed effect model was used unless

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					there was significant heterogeneity 4.4 Probably yes - Heterogeneity was investigated using subgroup analysis based on the type of incontinence or other differences in populations or interventions. If heterogeneity remained after appropriate investigation and possible removal of outlying trials, the random effects model was used. 4.5 Probably no - To assess publication bias, Eggers test was planned for analyses of >10 studies, however this was not possible. It was also minimised by the search strategy. 4.6 Probably yes - Sensitivity analyses excluding high risk of bias studies was planned however there was insufficient data to do this **Phase 3: Judging risk of bias: Low** A. Yes - no limitations found B. Yes - There is a section of the discussion focusing on

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					completeness and applicability of the evidence which discusses relevance of the evidence C. Yes - outcomes are reported for all studies
Full citation Ge, J., Wei, X. J., Zhang, H. Z., Fang, G. Y., Pelvic floor muscle training in the treatment of pelvic organ prolapse: A meta-analysis of randomized controlled trials, Actas Urologicas EspanolasActas Urol Esp, 03, 03, 2020 **Ref Id** 1290442 **Country/ies where the study was carried out** China **Study type** Systematic review	**Sample size** 15 studies N=1309 women **Characteristics** See inclusion criteria **Inclusion criteria** • (1) randomised control trial (RCT) • (2) the research participants were female with POP without other serious diseases • (3) the treatment group received PFMT, and the control group received standard treatment or other relative medicine • (4) only articles published in English were included **Exclusion criteria**	**Interventions** • PFMT versus lifestyle advice (6 studies) • PFMT versus watchful waiting (2 studies) • PFMT + lifestyle advice versus lifestyle advice (3 studies) • PFMT versus pessary treatment (1 study) • PFMT versus support device (1 study) • PFMT versus stabilisation advice (1 study) • PFMT + behavioural therapy versus usual care (1 study)	**Details** Clinical outcomes, such as pelvic organ prolapse quantification (POP-Q) stage change, self-reported change in symptoms, pelvic organ prolapse distress inventory-6 (POPDI-6), pelvic floor prolapse symptom score (POP-SS), urinary distress inventory-6 (UDI-6), and colorectal anal distress inventory-8 (CRADI-8) were used for evaluation. The Jadad scoring checklist was used to appraise the quality of involved studies. We evaluated all the RCTs from the five items: appropriateness of generating randomized sequence; randomization statement; description and use of double blind	**Results** **Self-reported change in symptoms** **Better** • RR (95% CI): 2.90 (1.72, 4.89) - 5 studies **Same** • RR (95% CI): 0.70 (0.45, 1.09) - 4 studies **Worse** • RR (95% CI): 0.67 (0.22, 2.03) - 4 studies **POP-SS (SMD, 95% CI)** • -0.24 (-0.71, 0.22) - 5 studies **POPDI-6** • -0.14 (-0.43, 0.15) - 4 studies **CRADI-8** • -0.33 (-0.16, 0.11) - 4 studies **UDI-6**	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Females with POP without other serious diseases 2. Intervention: The treatment group received PFMT 3. Comparison: The control group received standard treatment or other relative medicine 4. Outcomes: POP-Q stage change, Self-reported change in symptoms, POP-

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To assess the overall effect of pelvic muscle training (PFMT) on patients with pelvic organ prolapse (POP) based on eligible randomized controlled trials (RCT). **Study dates** Up to December 2018 **Source of funding**	• duplication publication of the same result or content • mistakes in data • economic analysis, meta-analysis, theoretical research, conference report, expert comment, systematic review, and case report • irrelevant outcomes.		method; detail of withdrawals and dropouts. Studies with a score of less than 3 represented low-quality and high bias risk studies, studies with a score exceeding 3 were considered as high-quality trials.	• -0.17 (-0.43, 0.10) - 4 studies	SS, POPDI-6, CRADI-8 and UDI-6 **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Probably yes - the objectives are clearly stated, and PICO is provided, however no mention of a protocol. 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Probably yes, there are restrictions such as the outcomes and format, these are not justified but seem appropriate 1.5 Probably no, no restrictions in eligibility criteria based on sources of information mentioned

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 2: Identification and selection of studies: High 2.1 No information - Cochrane, pubmed and Embase were used, but unpublished reports are not mentioned 2.2 No information - additional searching is not mentioned 2.3 No information - the PICO is reported but specific search terms and how they are combined are not 2.4 No information - language is not mentioned 2.5 Probably yes - inclusion of studies into this review was reached by consensus between the two reviewers, but does not specify that assessments were first done independently

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: Low 3.1 Probably yes - data extraction was carried out for two independent reviewers and consensus for any disagreements was made by discussion 3.2 Yes - included studies tables lists most important study characteristics 3.3 Probably yes - All relevant outcomes are included 3.4 Probably yes - quality assessed using a the Jahad scoring checklist 3.5 Probably yes - two independent reviewers carried out the assessments and then compared scores and resolved disagreements by discussion **Domain 4: Synthesis and findings: High** 4.1 Yes - all included studies provide results in the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					outcome tables, both significant and non-significant findings were reported 4.2 No information - no mention of a protocol or registration with prospero 4.3 Probably yes - included studies had similar designs (all RCT) and were analysed by outcome 4.4 Probably no - There was significant heterogeneity between studies in all meta-analyses. In these cases a random effects model was used 4.5 Yes - A funnel plot is reported which was symmetrical 4.6 Probably no - the specific quality assessment of each study was not reported. The methods states that studies with a score exceeding 3 were high quality and less than 3 was low quality, however unclear what the definition of a score of exactly 3 was, of which 8 studies were

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Phase 3: Judging risk of bias: High A. No - heterogeneity is discussed, however not the other limitations such as the search reporting is not reported B. Probably yes - included studies are directly relevant to the question. C. Yes - but significant and non significant results reported
Full citation Hagen, S., Stark, D., Conservative prevention and management of pelvic organ prolapse in women, Cochrane Database of Systematic Reviews, CD003882, 2011 **Ref Id**	**Sample size** 3 studies N=200 women **Characteristics** Populations in included studies: • women with stage I, II or III prolapse of any type • women undergoing prolapse repair surgery • women with stage I or II cystocele	**Interventions** Comparisons: • PFMT versus no treatment (3 studies) Other comparisons were reported but were not relevant for this review.	**Details** A fixed- effect model was used for calculation of pooled estimates and associated 95% confidence intervals. Differences between trials were further investigated if significant heterogeneity existed or appeared obvious from visual inspection of results. Meta-analysis was	**Results** **PFMT versus no treatment** <u>Prolapse symptom score</u> 1 study, 37 participants, MD -3.37 (-6.23, -0.51) <u>Self-report of no improvement in prolapse</u> 1 study, 40 participants, RR 0.48 (0.26, 0.91) <u>Prolapse QoL score</u> 2 studies, 87 participants, SMD -0.51 (-0.94, -0.07)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Adult women with any severity of pelvic organ prolapse. Prolapse included one or more of the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
376573 **Country/ies where the study was carried out** **Study type** Systematic review **Aim of the study** To determine the effects of specified conservative interventions on symptoms of pelvic organ prolapse and prolapse severity **Study dates** The date of the most recent search of the trials register was 6 May 2010 **Source of funding**	• women with stage I or II prolapse • Women undergoing surgery to correct POP and/or incontinence • Women over 60 years with anterior POP **Inclusion criteria** Types of studies • Randomised controlled trials • Quasi-randomised controlled trial Types of participants • Adult women with any severity of pelvic organ prolapse • Prolapse included one or more of the following types: anterior vaginal wall prolapse; posterior vaginal wall prolapse; prolapse of the apical segment of the vagina (uterus or vault) • Women at risk of prolapse Types of intervention • One arm of the trial was allocation to a physical or lifestyle		possible for the prolapse severity outcomes of three trials. Outcomes were not measured in the same way across trials, however in some cases meta-analysis was possible using the standardised mean difference.	<u>Change in ICIQ UI-SF</u> 1 study, 39 participants, MD -1.79 (-3.68, 0.10) <u>Mean score for prolapse interference with everyday life</u> 1 study, 40 participants, SMD -0.05 (-0.67, 0.57) <u>Ditrovie quality of life score</u> 1 study, 47 participants, SMD -0.95 (-1.57, -0.34) <u>Satisfaction with treatment (VAS 0-10)</u> 1 study, 47 participants, MD -3.22 (-3.79, -2.65) <u>Number with POP-Q stage not improved</u> 2 studies, 128 participants, RR 0.83 (0.71, 0.96) <u>Mean bladder symptom score</u> 1 study, 47 participants, MD -9.22 (-10.68, -7.76)	following: anterior vaginal wall prolapse; posterior vaginal wall prolapse; prolapse of the apical segment of the vagina (uterus or vault). 2. Intervention: One arm of the trial was allocation to a physical or lifestyle intervention, or combination including such interventions. 3. Comparison: no treatment, surgery or a mechanical device, or physical or lifestyle intervention if appropriate 4. Outcomes: prolapse symptoms, failure to improve prolapse symptoms, QoL, treatment outcome, severity of prolapse, PFM function, urinary outcomes, bowel outcomes, sexual outcomes, psychological outcomes, economic analysis, treatment adherence, adverse events, any other measure of perceived response, any other outcome not pre-specified but judged to be important

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	intervention, or combination including such interventions. This included ○ PFMT ○ PFMT + biofeedback ○ The knack ○ electrical stimulation ○ Weight reduction ○ Reduction of exacerbating activities ○ Treatment of constipation • Comparison interventions were no treatment, surgery or a mechanical device, or physical or lifestyle intervention if appropriate. Types of outcomes Primary outcomes • Prolapse symptoms (reported as number of women with prolapse symptoms) • Failure to improve prolapse symptoms (reported by the woman) • Prolapse symptom scores and prolapse-specific quality of life assessment for				**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is mention of a protocol being published in 2002 but no link or Prospero registration 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Yes- No restrictions on study characteristics explicitly reported 1.5 Yes - No restrictions on language and publication status **Domain 2: Identification and selection of studies: Low**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	example PQoL, ICIQ-VS, POP-SS, POPDI • Global assessment of treatment outcome Secondary outcomes • Severity of prolapse • Measures of pelvic floor muscle function • Urinary outcomes • Bowel outcomes • Sexual outcomes • Generic quality of life measures • Psychological outcome measures • Economic analysis Other outcomes • Treatment adherence • Adverse events • Any other outcome measures of perceived response to treatment • Any other outcome not pre-specified, but judged important when performing the review. **Exclusion criteria** Not reported				2.1 Yes - Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, CINAHL, EMBASE, PEDro, UK National Research Register, ClinicalTrials.gov, Current Controlled Trials register, and ZETOC database of conference abstracts were searched 2.2 Yes- The reference lists of relevant articles were searched for other possibly relevant trials, and hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Probably yes - Two review authors independently assessed each study against the inclusion criteria. Any differences of opinion were resolved through discussion or by involving a third party.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: High 3.1 Yes - Data extraction was undertaken independently by two reviewers and comparisons made to ensure accuracy. Trial data was processed using the Cochrane Handbook for Systematic Reviews of Interventions 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 No information - data was extracted to calculate risk ratio, or mean differences and SDs. No details are given for how this is calculated if this data is not provided in the required format. 3.4 Yes - quality assessed using the Cochrane 'Risk of bias' assessment tool 3.5 No information - no details on the process of risk of bias assessments including who performed them.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 4: Synthesis and findings: High 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate, however often there were only single studies. Meta-analyses were carried out only for trials with similar interventions 4.4 Probably yes - the meta-analysis with more than 1 study showed heterogeneity, however this was not explored with subgroup analysis, nor was a random effects model used. Because of the limited number of studies, results were mainly presented narratively, which is appropriate 4.5 Probably no - Most outcomes had single studies so sensitivity analyses were necessary. Those with more than 1 study and with heterogeneity did not have

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					sensitivity analyses carried out. Narrative synthesis is thorough. 4.6 Probably yes - risk of bias assessed thoroughly, and most was high quality. **Phase 3: Judging risk of bias: High** A. Probably no - authors discuss the limited evidence and some issues with studies of low quality, but don't refer to the limitations identified in domain 3 B. Probably yes - included studies are directly relevant to the question. Conclusions reflect both significant and non significant findings C. Yes - outcomes are reported for all studies
Full citation Hay-Smith, E. J. C., Herderschee, R., Dumoulin, C., Herbison, G. P., Comparisons of approaches to pelvic floor muscle training for urinary incontinence in	**Sample size** 21 studies N=1490 women **Characteristics** Diagnosis:	**Interventions** • PFMT: more or less contact with health professionals (6 studies) • Group versus individual PFMT (6 studies)	**Details** Meta-analysis where possible using a fixed-effect model unless otherwise stated.	**Results** **More of less contact with health professionals** <u>Patients' perception of change in incontinence - not cured</u> Additional group supervision with no difference in PFMT: 2	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
women, Cochrane Database of Systematic Reviews, 2011 **Ref Id** 939016 **Country/ies where the study was carried out** **Study type** Systematic review **Aim of the study** To assess whether there are differences in the effects of alternative approaches to pelvic floor muscle training in the management of urinary (stress, urge, mixed) incontinence in women **Study dates**	• Urodynamic stress urinary incontinence (8 studies) • Urodynamic stress urinary incontinence or stress urinary incontinence (based on signs or symptoms) (1 study) • Only stress urinary incontinence (based on signs or symptoms) (7 studies) • Either stress urinary incontinence or mixed urinary incontinence (where stress incontinence was the predominant symptom) (2 studies) • Either stress incontinence or mixed urinary incontinence (3 studies) • Only mixed urinary incontinence (1 study) Age Some studies set upper limits: • More than 65 years (7 studies) • More than 70 years (1 study) • more than 75 years (2 studies)	• Direct versus indirect PFMT (6 studies) • Individualised versus generic PFMT (1 study) • Daily versus 3x per week PFMT (1 study) • Upright and supine versus supine exercise (1 study) • More intensive versus less intensive PFMT (15 studies) • Strength and motor learning versus motor learning alone PFMT (1 study) • PFMT and abdominal muscle exercise versus PFMT alone (1 study) • PFMT with intravaginal device versus PFMT alone (2 studies) • PFMT and adherence strategy versus PFMT alone (1 study)		studies, 111 participants, RR 0.89 (0.78, 1.03) Individual supervision versus no supervision with differences in PFMT: 1 study, 64 participants, RR 0.86 (0.73, 1.02) <u>Patients' perception of change in incontinence - not improved</u> Additional group supervision with no difference in PFMT: 4 studies, 177 participants, RR 0.29 (0.15, 0.55) Individual supervision versus no supervision with difference in PFMT: 1 study, 64 participants, RR 0.1 (0.01, 0.71) <u>Incontinence specific QoL</u> Results not meta analysed. I-QoL: 1 study, 44 participants, median only, intervention group (more contact); 89, control group (less contact): 79 ICIQ-SF: 1 study, 59 participants, median (IQR), intervention group: 8 (5-13); control group 8 (6-12) <u>Symptoms</u> Results not meta analysed Social activity index: 1 study, results not usable	**Phase 1: Assessing Relevance** 1. Patients: All women with urinary incontinence diagnosed as having stress, urge or mixed incontinence on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists. 2. Intervention: At least two arms of all trials included the use of PFMT 3. Comparison: Different type of PFMT 4. Outcomes: symptomatic cure or improvement as reported by the woman, condition-specific quality of life assessment, number of leakage episodes; measures of leakage severity; micturition frequency; symptom impact; measures of pelvic floor muscle function; other health status or quality of life measures; formal economic analysis; treatment adherence; any of the primary or secondary outcomes in the longer term;

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
The date of the last search was 17 May 2011 **Source of funding**	• More than 80 years (1 study) Based on median or mean age: • up to 45 years (2 studies) • 45-49 years (4 studies) • 50-54 years (10 studies) • 55+ years (5 studies) **Inclusion criteria** Types of studies: • Randomised controlled trials • Quasi-randomised controlled trials Types of participants: • All women with urinary incontinence diagnosed as having stress, urge or mixed incontinence on the basis of symptoms, signs or urodynamic evaluation, as defined by the trialists Types of interventions: • At least two arms of all trials included the use of PFMT to treat the symptoms of urine leakage with some			Unvalidated QoL index: 1 study, 22 participants, mean (SD), intervention group (more contact) 1.7 (0.8); control group (less contact) 3.6 (1.5) *Symptom impact index: 1 study* *Symptom impact index (chinese version): 1 study* <u>Treatment adherence</u> Results not meta analysed Compliance:1 study, both groups 'close to 100%' Number of times exercised per week: 1 study, 59 participants, median (IQR), intervention group (more contact) 4 (2 to 6.5), control (less contact) 5 (2 to 6) Clinic attendance: intervention group 21/31, control group N/A **Group versus individual supervision of PFMT** <u>Patients' perception of change in incontinence - not cured</u> Individual supervision versus individual and group supervision, no differences in PFMT: 2 studies, 111 participants, RR 0.89 (0.78, 1.03)	adverse events; any other outcome not pre-specified, but judged important when performing the review. **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is mention of a protocol in the 'differences between protocol and review' section. This section states that originally, PFMT with/without BF was included, however there were so many studies of BF that this became its own review. Subgroup analysis also changed. 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	difference in the PFMT between the two arms • PFMT was defined as any programme of repeated voluntary pelvic floor muscle contractions, or 'indirect' voluntary pelvic floor muscle contraction irrespective of variations in purpose and training parameters. ○ 'Direct' PFMT includes focusing specifically on a voluntary contraction of the pelvic floor muscles ○ 'Indirect' PFMT includes pelvic floor muscle contraction that is facilitated or enhanced through co-contraction of another related muscle grou • Other comparisons of interest included different exercise parameters, the addition of resistance devices, types of instruction (that is verbal, written), the amount and type of			<u>Patients' perception of change in incontinence - not improved</u> Individual and group supervision versus individual supervision, no difference in PFMT: 3 studies, 133 participants, RR 0.16 (0.05, 0.46) Group supervision versus individual supervision, with difference in PFMT: 1 study, 69 participants, RR 1.2 (0.61, 2.34) <u>Incontinence specific QoL</u> Results not meta analysed Individual only vs individual and group ICIQ-SF: 1 study, only reported for one group Quality of life index: 1 study, mean (SD), group supervision 1.7 (0.8); individual supervision 3.6 (1.5) Individual versus group only *King's health questionnaire: 1 study, reports each item, no total score* *I-QoL: 1 study, reports each item, no total score* I-QoL: 1 study, 240 participants, total score (mean, SD), intervention group 78.1 (17.6); control group 83.1 (15.1)	1.4 Probably yes - restrictions included studies where UI might be due to significant factors outside the urinary tract. Nocturnal enuresis, postnatal/antenatal women were also excluded, as well as interventions for example PFMT with BF, lifestyle advice, and another standalone therapy. All of these seem appropriate and justification was provided for some but not all 1.5 Yes - No restrictions on language and publication status **Domain 2: Identification and selection of studies: Low** 2.1 Yes - the Cochrane Incontinence Group Specialised Trials Register was used which contains trials from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE and CINAHL, and handsearching

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	health professional supervision of training, and the addition of adjuncts for adherence Types of outcomes • the woman's observations (symptoms); • quantification of symptoms (for example, urine loss); • the clinician's observations (anatomical and functional); • quality of life and socioeconomic measures **Exclusion criteria** • Other forms of controlled clinical trials • women with urinary incontinence whose symptoms might be due to significant factors outside the urinary tract, for example neurological disorders, cognitive impairment, lack of independent mobility.			<u>Symptom impact</u> Results not meta-analysed Unvalidated QoL index: 1 study, 22 participants, mean (SD), group supervision 1.7 (0.8), individual supervision 3.6 (1.5) <u>Adherence</u> Results not meta-analysed Compliance: 1 study, both groups 'close to 100%' Number of times exercised per week: 1 study, median (IQR), intervention group 4 (2-6.5), control group 5 (2-6) Unclear: 1 study, intervention group 95%, control group 90% Participated in <50%: 1 study, 16/84, 6/92 Did not attend supervision sessions: 1 study, 11/84, 12/92 No exercise at home: 1 study, 100/123, 86/117 **Direct versus indirect methods of PFMT** <u>Patients' perception of change in incontinence - not cured</u> PFMT versus 'Sapsford approach': 1 study, 64 participants, RR 1.16 (0.98, 1.36)	of journals and conference proceedings 2.2 Probably yes - the Cochrane Incontinence Group Specialised Trials Register included trials identified by handsearching of journals and conference proceedings 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Probably yes - Two review authors independently evaluated records of all studies retrieved by the Trials Search Coordinator for eligibility without prior consideration of the results. Cross checking took place. Full text assessment was then done by two review authors and cross checked. Any disagreement was resolved through discussion

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Studies investigating nocturnal enuresis in women • Studies that specifically recruited antenatal or postnatal women • PFMT with adjunctive biofeedback unless the same biofeedback intervention was given in both arms • PFMT combined with lifestyles or fluid management advice (such as weight loss) unless the same advice was given in both arms. • PFMT combined with another 'stand alone' conservative therapy (such as bladder training [that is a scheduled voiding regimen], electrical stimulation, vaginal cones), or drug therapy (for example, an anticholinergic).			<u>Patients' perception of change in incontinence - not improved</u> PFMT versus sham/imitation PFMT: 2 studies, 138 participants, RR 0.69 (0.47, 1.02) PFMT versus 'Sapsford' approach: 1 study, 64 participants, RR 10.33 (1.42, 75.4) <u>Incontinence specific QoL</u> Results not meta-analysed I-QoL: 1 study, median % increase, direct 7.8%, indirect 4.8% I-QoL: 1 study, 59 participants, mean SD, change in total score: direct -4.6 (69.0); indirect 8.6 (18.8) *Also reports separate domains* I-QoL: 1 study, 240 participants, mean (SD), total score: direct 78.1 (17.6), indirect 83.1 (15.1) KHQ: 1 study, 11 participants, mean (range), symptom severity scores - PFMT 5.5 (2-9), pilates 3.5 (1-6) KHQ: 1 study, 11 participants, mean, range, composite score - PFMT 152.4 (83.82-197.2), Pilates 256.9 (147.2-416.6)	**Domain 3: Data collection and study appraisal: Low** 3.1 Yes - Data extraction was undertaken independently by two reviewers. A data extraction form used in a previous review was adapted and tested. Extractions were cross-checked. Any disagreements were resolved by discussion 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Probably yes - Where trial data were reported in a form that could not be used in the formal comparisons, reviewers sought further clarification from the trialists. If outcome data was reported in a way such that data could not be combined, it was presented in tables rather than forest plots. 3.4 Yes - quality assessed using the Cochrane 'Risk of bias' assessment tool

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Symptom impact Results not meta-analysed Symptom impact index (Chinese version): 1 study, 62 participants, avoiding activities due to worry about leaking - direct 15/31, indirect, 8/31. Avoiding activities due to needing a toilet - direct 16/31, indirect 7/31 Adherence Results not meta-analysed Compliance: 1 study, 97 participants, 4 weeks - direct 82%, indirect 91%; 8 weeks - direct 90%, indirect 84%; 12 weeks - direct 89%, indirect 88% Number of exercise sessions per week: 1 study, 44 participants, direct 52 sessions, indirect 54 sessions Participated in <50% of supervised sessions: 1 study, PFMT 16/84, Paula method 6/92 Did not attend any supervised sessions: 1 study, PFMT 11/84, Paula method 12/92 Documented no exercise at home: 1 study, PFMT 100/123, Paula method 86/117 Clinic attendance: 1 study, PFMT group 21/31, Sapsford N/A	3.5 Yes - Two review authors assessed risk of bias independently. Any disagreements were resolved by consensus or discussion **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. Subgroup analyses were said to be different from protocol 4.3 Probably yes - meta-analysis was done where appropriate (where there were enough trials). If meta-analysis was not considered appropriate a narrative synthesis was done. 4.4 Probably yes - heterogeneity was assessed in 3 ways. If there was significant heterogeneity, subgroup analysis was planned in

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Individualised versus generic PFMT Patients' perception of change in incontinence - not improved 1 study, 60 participants, RR 0.83 (0.43, 1.63) Incontinence specific QoL Results not meta-analysed *KHQ: 1 study, only reports each domain, not total score* Adherence Results not meta-analysed Unclear: 1 study, Individualised group 90%; generic PFMT: 95% **Daily versus 3 times per week PFMT** Patients' perception of change in incontinence - not cured 1 study, 40 participants, RR 1.18 (0.84, 1.65) Patients' perception of change in incontinence - not improved 1 study, 40 participants, (no events in either group) **Upright and supine versus supine exercise positions** Adherence	terms of type of UI (stress or urgency) 4.5 Probably no - no funnel plots were produced, however the search strategy should have reduced the risk of publication bias. Many of the analyses had single studies which may make the results precarious. 4.6 Probably yes - risk of bias assessed thoroughly. Sensitivity analysis with respect to risk of bias was planned, however there was insufficient trials to do this. **Phase 3: Judging risk of bias: Low** A. Yes - no issues were identified B. Probably yes - there is a section of the discussion that focuses on completeness and applicability of the evidence C. Yes - outcomes are reported for all studies, with

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Results not meta-analysed Number of clinic visits: 1 study, 44 participants, upright and supine group 8.9 (3.0); supine only 8.4 (2.8) **Strength and motor learning versus motor learning PFMT alone** Patients' perception of change in incontinence - not cured 1 study, 123 participants, RR 1.05 (0.98, 1.13) Patients' perception of change in incontinence - not improved 1 study, 123 participants, RR 0.65 (0.31, 1.40) Incontinence specific QoL Results not meta-analysed *KHQ: 1 study, reports separate domains, not total score* **PFMT and abdominal muscle exercise versus PFMT alone** Patients' perception of change in incontinence - not cured 1 study, 40 participants, RR 0.9 (0.63 (1.25) Patients' perception of change in incontinence - not improved	no specific studies/results over-emphasised

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study, 40 participants, no events in either group <u>Symptom impact</u> Results not meta-analysed Question 5 from ICIQ-LUTSqol: 1 study, PFMT and device 5/15, PFMT alone 5/15 **PFMT with intravaginal resistance device versus PFMT alone** <u>Patients' perception of change in incontinence - not cured</u> 2 studies, 120 participants, RR 1.07 (0.96, 1.20) <u>Patients' perception of change in incontinence - not improved</u> 2 studies, 120 participants, RR 0.86 (0.62, 1.20) <u>Adherence</u> Results not meta-analysed Did not do routine: 1 study, PFMT with adherence strategy 0/41; PFMT 12/34 Did not do twice daily PFMT: 1 study, PFMT with adherence strategy 7/41, PFMT 30/34 **PFMT and adherence strategy versus PFMT alone**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Patients' perception of change in incontinence - not improved 1 study, 41 participants, RR 0.56 (0.34, 0.91) **'More intensive' versus 'less intensive' PFMT programmes** Patients' perception of change in incontinence - not cured 'High' contrast: 3 studies, 175 participants, RR 0.89 (0.80, 0.98) 'Low' contrast: 5 studies, 304 participants, RR 1.06 (1.00, 1.13) Patients' perception of change in incontinence - not improved 'High contrast: 6 studies, 335 participants, RR 0.37 (0.17, 0.84) 'Moderate' contrast: 1 study, 44 participants, RR 0.34 (0.17, 0.71) 'Low' contrast: 7 studies, 405 participants, RR 0.75 (0.59, 0.95)	
Full citation Herbison, G. P., Dean, N., Weighted vaginal	**Sample size** 23 studies N=1806 women	**Interventions** • Cones versus control (5 studies)	**Details** Data were combined when possible, using rate ratios (RR) for	**Results** **Cones versus control** No subjective improvement or cure	**Limitations** Limitations were assessed using the ROBIS tool to

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
cones for urinary incontinence, Cochrane Database of Systematic Reviews, 7, CD002114, 2013 **Ref Id** 542506 **Country/ies where the study was carried out** New Zealand/UK **Study type** Systematic review **Aim of the study** To determine the effectiveness of vaginal cones in the management of female urinary stress incontinence **Study dates** Date of the most recent search of the Specialised	**Characteristics** One trial recruited pre-menopausal women, and one post- menopausal women, while another recruited women at three months postpartum. Most trials recruited women with urodynamically-proven stress incontinence with few other inclusion or exclusion criteria. In seven trials, symptoms of stress incontinence were sufficient for women to be included, but in one study it was unclear what inclusion criteria had been used **Inclusion criteria** Types of studies • Randomised or quasi-randomised controlled trials Type of participants • Women whose predominant complaint is stress urinary incontinence (SUI), diagnosed either by symptom classification or	• Cones versus PFMT (11 studies) • Cones versus electrostimulation (5 studies) • Cones + PFMT versus PFMT (2 studies) Excluded comparisons: • Cones + PFMT versus electrostimulation (3 studies) • Cones versus PFMT + cones (2 studies) Most studies involved holding the cone in place for two sessions of 15 minutes per day. Studies that differed from this protocol included: • two times per day for 10 minutes each (1 study) • one time per day for 10 minutes (1 study) • one time per day for 15 minutes (1 study) • women exercised while holding the weighted balls two times a day and carried the weight for one session of 15 minutes (2 studies)	dichotomous data and mean differences (MD) for continuous data. A fixed-effect analysis was used to calculate the pooled estimates and their 95% confidence intervals	2 studies, 215 participants, RR 0.72 (0.52, 0.99) <u>No subjective cure</u> 4 studies, 375 participants, RR 0.84 (0.76, 0.94) **Cones versus PFMT** <u>No subjective improvement or cure</u> 6 studies, 358 participants, RR 0.97 (0.75, 1.24) No subjective cure 5 studies, 338 participants, RR 1.01 (0.91, 1.13) **Cones versus electrostimulation** <u>No subjective improvement of cure after treatment</u> 3 studies, 151 participants, RR 1.26 (0.85, 1.87) <u>No subjective improvement of cure after 6 months</u> 3 studies, 154 participants, RR 1.24 (0.98, 1.59) **Cones + PFMT versus PFMT** <u>No subjective improvement or cure after 6 weeks</u> 1 study, 46 participants, RR 1.41 (0.81, 2.45) <u>No subjective improvement or cure after 12 weeks</u>	assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Women whose predominant complaint is stress urinary incontinence (SUI), diagnosed either by symptom classification or urodynamics. 2. Intervention: One arm of the study must have included the use of weighted vaginal cones following a standardised (within trial) protocol 3. Comparison: other conservative treatments such as pelvic floor muscle training (PFMT) or electrostimulation, or surgery, injectables etc. 4. Outcomes: patient symptoms, QoL, physical measures, health economics

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Register was 19 September 2012 **Source of funding** Sources of support include Dunedin Faculty of Medicine, Southern Regional Health Authority, New Zealand Health Research Council, National Institute for Health Research	urodynamic testing or diagnosis? Type of intervention • One arm of the study must have included the use of weighted vaginal cones • Comparators could include other conservative treatments such as pelvic floor muscle training (PFMT) or electrostimulation, or surgery, injectables etc Types of outcomes • Patient symptoms - perception of cure and improvement of urinary incontinence; number of incontinent episodes in 24 hours. • Quality of life measures - general health status (for example SF36), severity of incontinence, psychosocial measures, impact of incontinence. • Physical measures - change in weight of cone retained, perineometry or other measures of pelvic	One study used a different type of cone, varied the weight by asking that the degree of reclining was varied, and instructed women to contract the pelvic floor muscles around the cone Seven trials used 9 weights, 7 used 5 weights, 1 used 3 weights and 1 used 1 weight, and 1 had variable amount of weights. Two studies used balls instead of cones. Three used an unknown number of weights. Comparison groups used a wide range of treatments.		1 study, 46 participants, RR 0.92 (0.51, 1.64) No subjective cure 1 study, 33 participants, RR 1.21 (0.63, 2.32) **Cones + PFMT versus electrostimulation** No subjective improvement or cure after treatment 2 studies, 160 participants, RR 1.46 (0.82, 2.61) **Cones versus PFMT + cones** No subjective cure 1 study, 35 participants, RR 0.83 (0.44, 1.58)	**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. There is no mention of a protocol and a protocol couldn't be located by searching the cochrane library 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Yes- No restrictions on study characteristics explicitly reported 1.5 Yes - No restrictions on language and publication status **Domain 2: Identification and selection of studies: Low**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	floor muscle strength, pad tests with measured leakage, ultrasound or radiographic measures of bladder neck descent and mobility. • Health economics - cost of interventions, resource implications of differences in outcome, formal economic analysis (for example cost effectiveness, cost utility), teaching time **Exclusion criteria** Not reported				2.1 Yes - trials were identified from the Group's Specialised Register of controlled trials, which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, and CINAHL. EMBASE was also searched 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Probably yes - at least two review authors checked eligibility. Any differences of opinion were resolved through discussion with a third party. Unclear if two authors assessed titles and abstracts, or just full text.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: Low 3.1 Probably yes - Data extraction was undertaken one author and cross checked by a second. Doesn't explicitly state that what the cross checking involved. 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Probably yes - For the pad tests outcome, the different tests used were dichotomised into improvement/no improvement, sometimes requiring the help of authors. Rate ratios (RR) were used for dichotomous data and mean differences (MD) for continuous data. 3.4 Yes - Two review authors made an independent assessment of methodological quality using the Cochrane Collaboration 'Risk of bias' tool. 3.5 Probably yes - Data were abstracted by the lead

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					author and cross-checked by the co-author **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate, however often there were only single studies. Meta-analyses were carried out only for trials with similar interventions 4.4 Yes - there was no substantial heterogeneity. Subgroup analysis was pre-specified for investigation if heterogeneity was present 4.5 Probably no - There were too few studies to make funnel plots clearly interpretable, or to place any reliance on small sample bias statistics. It was also not possible to conduct potential sensitivity analyses for methodological quality

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					due to the small number of trials in each comparison 4.6 Yes - risk of bias assessed thoroughly, and taken into account in the discussion **Phase 3: Judging risk of bias: Low** A. Yes - no limitations identified B. Probably yes - included studies are directly relevant to the question. Conclusions reflect both significant and non significant findings C. Yes - outcomes are reported for all studies **Other information** Other outcomes include pad test, leakage episodes, PFM strength, leakage (grams)
Full citation Herderschee, R., Hay-Smith, E. J. C., Herbison, G. P., Roovers, J. P., Heineman, M. J., Feedback or	**Sample size** 24 studies N=1583 women **Characteristics** Method of diagnosis	**Interventions** • PFMT + BF versus PFMT alone (16 studies) • PFMT + feedback versus PFMT alone (2 studies)	**Details** For dichotomous data, such as number of women cured or improved, the numbers reporting an outcome to the numbers at risk in each group were	**Results** **PFMT + BF versus PFMT alone** <u>Quality of life - data not meta-analysed</u> Berghmans 1996: Protection, Amount, Frequency, Adjustment, Body image	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
biofeedback to augment pelvic floor muscle training for urinary incontinence in women, Cochrane Database of Systematic Reviews, 2011 **Ref Id** 939021 **Country/ies where the study was carried out** **Study type** Systematic review **Aim of the study** To determine whether feedback or biofeedback adds further benefit to PFMT for women with urinary incontinence. To compare the effectiveness of different forms of feedback or biofeedback	• 13 trials diagnosed the type of UI based on urodynamics • 6 trials diagnosed based on urodynamics or symptom questionnaire, or both • One trial based confirmation of SUI on more than 2 g leakage on a 1-hour pad test • In three trials the diagnosis of UI was symptomatic • In one trial it was not stated how UI was diagnosed Type of UI • SUI only: 14 studies • SUI and MUI: 5 studies • SUI, MUI and UUI: 2 studies • UUI and MUI: 1 study • UUI: 2 studies **Inclusion criteria** Types of studies • Randomised controlled trials and quasi-randomised trials Types of participants	Other comparisons were reported but not relevant for this review • PFMT + BF + feedback versus PFMT alone (1 study) • PFMT + BF versus PFMT + feedback (5 studies) • PFMT + BF versus PFMT + BF (2 studies) • **PFMT** There were two main differences between the PFMT in the feedback (or BF) and non-feedback (or BF) arms: the amount of PFMT supervision (and health professional contact) and the PFMT parameters. Amount of supervision • Seventeen trials stated that the amount of supervision was equal in both groups • Seven trials reported different amounts of supervision between the groups, including different numbers of	related to derive a risk ratio, with 95% confidence intervals. For continuous outcome data, such as quality of life scores, results from each study are expressed as a difference in means with 95% confidence intervals. If similar outcomes were reported on different scales the standardised mean difference (SMD) was calculated. Ninety five percent confidence intervals were presented for all outcomes.	(PRAFAB), mean (SD) PFMT+BF 11.1 (5.9) n=20; PFMT 13.1 (8.6) n=20 Laycock 2001a: King's Health Questionnaire (KHQ), mean (SD), PFMT+BF 6.14 (2.59) n=22; PFMT 8.13 (4.44) n=16 McClurg 2006: KHQ total score (also reports the 4 subscales), mean (SD), PFMT+BF 55.1 (39.5) n=10; PFMT 96.7 (44.8), n=10 Schmidt 2009: KHQ total score, mean SD, PFMT+BF 44.25 (9.11) n=11; PFMT 48.7 (22.21) n=11 Smidt 1997: PRAFAB, mean SD, PFMT+BF 7.94 (10.13) n=18; PFMT 11.47 (8.62) n=15 Burgio 2002b: IIQ, SF36SF - no data Goode 2003: IIQ, SF36SF - no data Tejero 2008: IIQ - no data Wang 2004: KHQ - only the 9 reports subscales, not total score <u>Women's perception of change in incontinence - not cured or improved</u> 7 studies, 520 participants, RR 0.75 (0.66, 0.86) Women's perception of change in incontinence - not cured	**Phase 1: Assessing Relevance** 1. Patients: Women of all ages with SUI, UUI or MUI, diagnosed by symptoms (as reported by the woman), signs (as reported or observed by the health care professional) or urodynamics, regardless of cause. 2. Intervention: use of a PFMT programme in two or more arms of the study 3. Comparison: at least one PFMT arm had to include a form of feedback or biofeedback 4. Outcomes: women's observations, clinicians obervations, quantification of symptoms, symptom distress, socioeconomic measures, adverse events, non-prespecified outcomes judged important when performing the review.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates The date of the last search was 13 May 2010 **Source of funding**	• Women of all ages with SUI, UUI or MUI, diagnosed by symptoms (as reported by the woman), signs (as reported or observed by the health care professional) or urodynamics, regardless of cause • Women whose ability to identify and train the pelvic floor muscles might be impaired by trauma or disease were included • Studies that used urodynamic diagnosis of detrusor overactivity as an inclusion criterion that included participants who had urgency but no UUI were included as long as two thirds or more of the study participants had UUI Types of intervention • The trial must have made use of a PFMT programme in two or more arms of the study, to treat UI • At least one PFMT arm had to include a form of	clinic check ups, different durations of sessions (15 minutes vs 1 hour), different number of contacts with health professionals (one appointment and instruction sheet on PFMT in PFMT only groups, vs multiple contacts in BF groupss PFMT parameters • Five trials described a difference in exercise programme across the comparison groups (e.g. different types or number of exercises) • Four trials used the PERFECT scheme to confirm a correct voluntary pelvic floor muscle contraction at baseline or to design an individualised training program • Three trials stated that a correct voluntary pelvic floor muscle contraction was confirmed prior to training by use of		5 studies, 321 participants, RR 0.92 (0.81, 1.05) Women's satisfaction with progress - not satisfied 3 studies, 294 participants, RR 0.65 (0.46, 0.90) <u>Symptom distress - not meta-analysed</u> McClurg 2006: UDI total score (3 subscales also reported), mean (SD) PFMT+BF 81.6 (36.7) n=10; PFMT 113.3 (69.4) n=10 Morkved 2002: leakage index (mean, SD); PFMT+BF 1.9 (0.7) n=48; PFMT 1.9 (0.7) n=46 Morkved 2002: Social activity index, mean (SD); PFMT+BF 9.5 (0.7) n=48; PFMT 9.4 (0.7) n=46 Burgio 2002b: Hopkins symptom checklist 90-R - no data Goode 2003: Hopkins symptoms checklist 90-R - only reports 10 subscales, not total score, does report anxiety - PFMT+BF 45.9 (13.2); PFMT 47.3 (12.2) and depression - PFMT+BF 50.4 (12.1); PFMT 52.8 (12.5) <u>Adherence to treatment - not meta-analysed</u>	**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. Mention of a protocol in the 'contribution of authors' and 'differences between protocol and review' sections 1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Yes, the criteria are well defined and unambiguous 1.4 Yes - there are restrictions based on population and interventions, but clear justification for this is provided 1.5 Yes - No restrictions on language and publication status

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	feedback (or BF) to teach, modulate or encourage pelvic floor muscle contractions • PFMT was defined as programme of repeated voluntary pelvic floor muscle contractions taught by a health care professional • Interventions that gave advice on strategies for symptoms of urge and/or frequency or other lifestyles advice were eligible for inclusion provided the same advice was given to both study arms being compared • Feedback studies were defined as those which use a clinician mediated method of giving information about a voluntary pelvic floor muscle contraction back to the woman performing the contraction • Biofeedback studies were defined as those using an instrument or device to record the biological signals during a	digital vaginal palpation **Feedback and Biofeedback (BF)** • Six trials used verbal feedback from the health professional during or after digital vaginal palpation of a voluntary pelvic floor muscle contraction • One also described clinician feedback based on observation of the perineum BF was more commonly used than feedback. Devices included • electrical activity using electromyography (10 trials) • vaginal and/or anal squeeze pressure (10 trials) • movement with ultrasound (1 trial)		Berghmans 1996: adherence to clinical sessions, %, PFMT+BF 100% n=20; PFMT 100% n=20 Laycock 2001a: adherence to home treatment, %, PFMT+BF 79% n=22; PFMT 81% n=16 McClurg 2006: adherence to clinical sessions, %, PFMT+BF 78% n=10; PFMT 78% n=10; adherence to home BF use, %, PFMT+BF 75%, PFMT n/a Morkved 2002: % exercise >3x a week, %, PFMT+BF 88.9% n=48; PFMT 85.3% n=46 Schmidt 2009: compliance with treatment - no data Sherman 1997: adherence to exercises, n, PFMT+BF 0=rarely, 5=occasionally, 9=frequently, 1=all the time, n=15; PFMT 1=rarely, 15=occasionally, 6=frequently, 0=all time time Smidt 1997: adherence to exercises - not data Glavind 1996: number of participants exercising regularly, n, PFMT+BF 17/19; PFMT 7/14 Tejero 2008: 'compliance', n, PFMT+BF 16/16; PFMT 16/18 Wang 2004: adherence to treatment, median %,	**Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - trials were identified from the Cochrane Incontinence Group Specialised Trials Register, which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, CINAHL. EMBASE was not searched 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Yes - two review authors independently screened titles and abstracts. Excluded studies were cross checked. Full text was then independently assessed by the two authors.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	voluntary pelvic floor muscle contraction and present this information back to the woman in auditory or visual form • Intravaginal resistance devices that resisted the muscle contraction but also gave biofeedback Types of outcomes • woman's observations • quantification of symptoms • clinician's observations • quality of life • socioeconomic measures **Exclusion criteria** • Studies of women with hypertonic pelvic floor muscles • Studies where PFMT was used to prevent UI • Studies where PFMT was combined with any other physical therapy that might influence pelvic floor muscle performance or drug therapy that might influence urethral			PFMT+BF 0.75 (0.54-1.00) n=34; PFMT 0.833 (0.25-1.00) n=34. Adherence to home training, days (median), PFMT+BF 14.5 (0-44); PFMT 8.5 (0-44) Wilson 1987: adherence to clinical sessions, 'no difference stated' <u>Follow up data - not meta-analysed</u> McClurg 2006: UDI at 24 weeks, total score, mean (SD), PFMT+BF 77.9 (33.5) n=10; PFMT 139.6 (66.5) n=9 McClurg 2006: IIQ at 24 weeks, total score, mean (SD), PFMT+BF 62.5 (44.2) n=10; PFMT 101.6 (46.1) n=9 McClurg 2006: UDI at 16 weeks, total score, mean (SD), PFMT+BF 93.5 (50.9) n=10; PFMT 150.6 (79.7) n=9 McClurg 2006: IIQ at 16 weeks, total score, mean (SD), PFMT+BF 67.8 (44.8) n=10; PFMT 105.6 (58.8) n=9 Schmidt 2009: KHQ total score, mean (SD), PFMT+BF 41.12 (15.44), n=11; PFMT 49.3 (24.96) n=11 Glavind 1996: Women still doing PFM exercises regularly at 2-3 years, PFMT+BF 17/19, PFMT	**Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Data extraction was undertaken by two people and results were cross checked. Any differences were resolved by discussion. A data extraction form was designed an tested to extract the data. 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Yes - For dichotomous data the numbers reporting an outcome to the numbers at risk in each group were related to derive a risk ratio, with 95% confidence intervals For continuous outcome data, results from each study are expressed as a difference in means with 95% confidence intervals. If similar outcomes were reported on different scales the standardised mean difference (SMD) was calculated.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	closure pressure or detrusor contraction • Studies where the trialists described the use of an intra-vaginal resistance device, which did not give auditory or visual feedback on the pelvic floor muscle contraction			7/14. Women still subjective 'cured' at 2-3 years, PFMT+BF 5/19, PFMT 0/14. Women still subjective 'improved' at 2-3 years, PFMT+BF 8/19, PFMT 4/14 Pages 2001: subjective cure and improvement at 3 months, PFMT+BF 13/13, PFMT 27/27; subjective cure at 3 months, PFMT+BF 8/13, PFMT 19/27 Wilson 1987: symptomatic improvement reported by women 'much better', PFMT+BF 3/14; PFMT 2/15 **PFMT+F versus PFMT alone** <u>Quality of life - not meta-analysed</u> Burgio 2002a: IIQ+ SF36SF - no data, text reported no differences between groups <u>Women's perception of change in incontinence - not cured or improved</u> 1 study, participants, RR 0.53 (0.37-0.78) <u>Women's satisfaction with progress - not satisfied</u> 1 study, 116 participants, RR 0.33 (0.16, 0.66) <u>Symptom distress - not meta-analysed</u>	3.4 Yes - The risk of bias for the included studies was assessed using the Cochrane Risk of Bias Assessment Tool 3.5 Yes - Risk of bias was assessed by two authors, and any disagreements were resolved by consesnsus or discussion with a third author. **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Probably yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate, however often there were only single studies. Meta-analyses were carried out only for trials with similar interventions. Where there was heterogeneity,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Burgio 2002a: Hopkins symptom checklist - no data **PFMT+F+BF versus PFMT alone** <u>Quality of life - not-meta-analysed</u> Williams 2006: Leicestershire Impact Score - no data <u>Women's perception of change in incontinence - not cured - not meta-analysed</u> Williams 2006: women reporting no symptoms, OR, face to face vs leaflet 1.59 (0.43, 5.87) <u>Symptom distress - not meta-analysed</u> Williams 2006: Number of participants reporting they would be "satisfied with current urinary symptoms for the rest of life", PFMT+F 30/80; PFMT 34/79 <u>Adherence to treatment - not meta-analysed</u> Williams 2006: number of exercises daily performed, %, PFMT+BF+F 76%; PFMT 80%. Women exercising 'most or all of the time', PFMT+F+BF 58/76, PFMT 61/76 **PFMT+BF versus PFMT + F**	pre-specified subgroup analysis was performed. 4.4 Yes - there were pre-specified subgrouping for where there was heterogeneity 4.5 Probably yes - Sensitivity analysis with respect to risk of bias was planned but there were insufficient studies to carry this out. The influence of allocation of concealment was investigated in one comparison (PFMT + BF versus PFMT alone) with a reasonable number of trials 4.6 Probably yes - risk of bias assessed thoroughly. The influence of allocation of concealment was investigated in one comparison **Phase 3: Judging risk of bias: Low** A. Yes - No limitations identified B. Yes - included studies are directly relevant to the question. Conclusions reflect

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Quality of life - not meta-analysed Burgio 2002c: IIQ + SF36SF - no data Tsai 2002: IIQ-7, mean (SD), PFMT+BF 6.91 (3.93) n=43; PFMT+F 7.96 (5.27) n=26 Women's perception of change in incontinence - not cured or improved 2 studies, 130 participants, RR 1.02 (0.64, 1.63) Women's perception of change in incontinence - not cured 1 study, 20 participants, RR 1.0 (0.42, 2.40) Women's satisfaction with progress - not satisfied 1 study, 107 participants, RR 1.59 (0.71, 3.57) Symptom distress - not meta-analysed Burgio 2002c: Hopkins Symptom checklist - no data Aksac 2003: Social Activity Index, median (SD), PFMT+BF 8.1 (0.8) n=20; PFMT+F 7.5 (1.2) n=20 Adherence to treatment - not meta-analysed Tisseverasinghe 2006: % compliance with home exercises, PFMT+BF 76.8% n=10, PFMT+F 63.4% n=10 Tsai 2002: Adherence calculated as a proportion,	both significant and non significant findings C. Yes - outcomes are reported for all studies whether significant or not

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				mean % score (SD), PFMT+BF 88.68 (14.79) n=49; PFMT+F 65.53 (24.86) n=49 <u>Follow up data - not meta-analysed</u> Tisseverasinghe 2006: KHQ at 3 months, reports 9 domains but not total score **PFMT+BF versus PFMT+BF** <u>Quality of life - not meta-analysed</u> Wong 2001: IIQ-7, mean, total score, control 14.29 n=19; experimental 14.29 n=19 <u>Symptom distress - not meta-analysed</u> Wong 2001: UDI-6, mean total score, PFMT+(extra)BF 27.78 n=19; PFMT+BF 16.67 n=19 <u>Adherence to treatment - not meta-analysed</u> Aukee 2002: adherence to home BF group, mean trainings, PFMT+(extra) BF 68 (9-130); PFMT+BF n/a. Adherence to treatment, mean days (range), PFMT+(extra) BF 47.5 (6-93) n=16; PFMT+BF 56.2 (21-87) Also reports data for subgroups	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Imamura,M., Abrams,P., Bain,C., Buckley,B., Cardozo,L., Cody,J., Cook,J., Eustice,S., Glazener,C., Grant,A., Hay-Smith,J., Hislop,J., Jenkinson,D., Kilonzo,M., Nabi,G., N'Dow,J., Pickard,R., Ternent,L., Wallace,S., Wardle,J., Zhu,S., Vale,L., Systematic review and economic modelling of the effectiveness and cost-effectiveness of non-surgical treatments for women with stress urinary incontinence, Health Technology Assessment, 14, 1-215, 2010 **Ref Id**	**Sample size** 176 studies N=9721 women The sample size ranged from 11 to 683, with a total of N=9721 participants. A large proportion of the participants (N = 4197) came from 11 pharmaceutical trials comparing SNRI with placebo **Characteristics** See inclusion criteria **Inclusion criteria** Types of participants • all women had SUI alone (type-1 population) • at least 50% of women had SUI alone; the remainder could have UUI or MUI (type-2 population) • under 50% of women had stress incontinence alone but the majority	**Interventions** • PFMT versus no treatment (14 studies) • PFMT with additional sessions versus PFMT (1 study) • Electrical stimulation versus no treatment (8 studies) • Vaginal cones versus no treatment (2 studies) • PFMT versus electrical stimulation (7 studies) • PFMT versus vaginal cones (6 studies) • PFMT + BF versus PFMT (15 studies) • PFMT + vaginal cones versus PFMT (1 study) • PFMT + electrical stimulation versus PFMT (7 studies) • Excluded combinations; drug treatments; bladder training comparisons	**Details** For trials with multiple publications, only the most up-to-date or complete data for each outcome were included. Overall, there was inconsistency in outcome measures chosen by the trialists. For this reason, quantitative synthesis was performed on primary outcomes only. A random effects model was used to derive summary estimates with 95% CI of odds ratio (OR) for dichotomous variables (cure and improvement rates) and standardised mean difference (SMD) for continuous variables (quality of life measures). The random effects model was chosen because of variability in the characteristics of included studies in terms of participants' diagnoses (inclusion of women with stress, urge or mixed incontinence), variation	**Results** **PFMT versus no treatment** Cure rate 8 studies, PFMT 70/308; control 20/297, OR 5.41 (1.64, 17.82) Adverse events - not meta-analysed 1 study: PFMT 4/33; control 0/33 1 study: PFMT 2/79; control 0/79 **PFMT + BF versus no treatment** Cure rate 2 studies, PFMT 25/60; control 1/50, OR 21.54 (3.65, 126.98) **PFMT versus PFMT plus biofeedback** Cure rate 8 studies, PFMT 61/191; PFMT + BF 87/179, OR 0.48 (0.3, 0.77) Improvement rates 7 studies, PFMT 120/157, PFMT+BF 119/139, OR 0.41 (0.18, 0.97) Adverse events - not meta-analysed 1 study: PFMT 3/15; PFMT+BF 4/15 1 study: PFMT 3/46; PFMT+BF 7/48	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: women with SUI or incontinence that was predominantly SUI (however diagnosed). Classification of diagnoses was accepted as defined by the trialists. 2. Intervention: non-surgical treatment (could be undertaken in a heath-care professional's office or clinic and patients' homes). Including lifestyle, physical/behavioural therapy (PFMT, electrical stimulation, vaginal cones, bladder training), pharmacotherapy 3. Comparison: A valid comparator was one of the included interventions or no treatment 4. Outcomes: Number of women cured, number of women cured or improved,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
135762 **Country/ies where the study was carried out** UK **Study type** Systematic review **Aim of the study** To assess the clinical effectiveness and cost-effectiveness of non-surgical treatments for women with stress urinary incontinence (SUI) **Study dates** The main searches were run during September to November 2007, with updates in December 2007/January–February 2008	(50% or more) had MUI with stress symptoms as a predominant pattern; the remainder could have SUI, UUI or MUI (type-3 population) • Incontinent women during pregnancy or in the early postpartum period were considered for inclusion but were analysed separately Types of intervention • Non-surgical treatment was defined as that which could be undertaken in a heath-care professional's office or clinic and patients' homes. Any of the following interventions, alone or in combination, were included ○ lifestyle for example weight loss ○ Physical or behavioural therapy for example PFMT ○ Electrical stimulation ○ Weighted vaginal cones ○ Bladder training • Pharmacotherapy		in the treatment programmes, and the frequency and duration of treatment. Odds ratios were used because of their symmetry compared with relative risks and were therefore unaffected by outcome definitions (for example number of women cured or not cured). Odds ratios were also chosen to fulfil a requirement of the MTC model.	<u>Quality of life - not meta-analysed</u> Social activity index 1 study: median (SD), PFMT 7.5 (1.2) n=20; PFMT+BF 8.1 (0.8) n=30 1 study: mean (SD), PFMT 9.5 (0.74) n=34; PFMT+BF 9.6 (0.61) n=36 Modified PRAFAB 1 study: mean (SD), PFMT 13.1 (8.6) n=20; PFMT+BF 11.1 (5.9) n=20 King's Health Questionnaire 1 study: change in mean (SD), PFMT 8.13 (9.06) n=16; PFMT+BF 6.14 (6.20) Incontinence Impact Questionnaire 1 study, change in mean (SD), PFMT 24.5 (10.8) n=7; PFMT+BF 8.5 (19.9) n=10 **PFMT versus PFMT with additional sessions** <u>Cure rate</u> 3 studies: PFMT 9/60; control 25/58, OR 0.11 (0.03, 0.43) Improvement rates 2 studies: PFMT 21/39; control 34/35, OR 0.05 (0.01, 0.28) <u>Quality of life - not meta-analysed</u> Social activity index 1 study: mean (SD), PFMT 8.2 (2.06) n=29;	adverse events, condition-specific quality of life, quantification of symptoms, participant satisfaction or desire for further treatment, number of women having incontinence surgery, return of symptoms/recurrence, socioeconomic measures, other intermediate, explanatory or treatment specific outcomes **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Probably yes - the objectives are clearly stated, and very detailed PICO is provided. No mention of a protocol 1.2 Yes - eligibility criteria are appropriate and detailed 1.3 Yes - criteria is detailed and unambiguous. 1.4 Probably yes - there are some restrictions on

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding Funded by an educational grant by American Medical Services	Where studies reported a comparison involving a programme of interventions (for example PFMT plus BT), then these studies were included, provided that every participant in the intervention arm received all of the specified treatments. Types of comparator • Either one of the included interventions or no treatment Types of outcomes Primary outcomes • Number of women cured. • Number of women cured or improved • Adverse events. • Condition-specific (and generic measures of health-related) quality of life Secondary outcomes • Quantification of symptoms • Participant satisfaction or desire for further treatment • Long-term data			PFMT+additional sessions 9.3 (0.73) n=23 Quality of life index 1 study: mean (SD), PFMT 3.6 (1.5) n=10; PFMT+ additional sessions 1.7 (0.8) n=12 Incontinence quality of life 1 study: median, PFMT 29, n=29; PFMT+additional sessions 89, n=23 **Electrical stimulation versus no treatment** <u>Cure rate</u> 6 studies: ES 9/152; Control 8/136, OR 1.10 (0.41, 2.94) <u>Improvement rate</u> 7 studies: ES 71/192; Control 23/177, OR 3.93 (1.43, 10.80) <u>Adverse events - not meta-analysed</u> 1 study: ES 10/32; Control 0/32 1 study: ES 14/35; Control 7/17 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: change in mean (SD): ES 0.6 (1.02) n=25; Control -0.2 (1.68) n=30 Incontinence Impact questionnaire 1 study: change in mean (SD): ES -4.1 (16.4) n=12; Control -9.1 (17.1) n=12 Urogenital Distress Inventory	population however there is no justification given for most of these 1.5 Yes - there were no restrictions in terms of language or date **Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - the Cochrane Incontinence Group Specialised Register of controlled trials of interventions for urinary incontinence was used, which contained trials identified from MEDLINE, the Cochrane Central Register of Controlled Trials (CENTRAL), CINAHL, and from hand searching relevant journals and conference proceedings. Additional databases were searched: CINAHL, EMBASE, BIOSIS, Science Citation Index and Social Science Citation Index, Current Controlled

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Socioeconomic measures. • Other intermediate, explanatory or treatment specific outcomes for example treatment adherence **Exclusion criteria** • The proportion of women with predominantly SUI was not reported, if the type of incontinence (stress, urge, mixed) was unknown or undiagnosed • If predominant symptoms (stress or urgency) of women with MUI were not specified • Women with urinary incontinence whose symptoms might be due to significant factors outside the urinary tract • Studies investigating nocturnal enuresis in women • Studies investigating prevention of incontinence among childbearing women			11 study: change in mean (SD): ES -11.8 (15.9) n-12; Control -3.3 (8.3) n=12 **Vaginal cones versus no treatment** <u>Improvement rates</u> 2 studies: VC 68/106; Control 54/105, OR 5.43 (0.07, 396.77) <u>Adverse events - not meta-analysed</u> 1 study: VC 18/19; Control 0/32 1 study: VC 2/80; Control 0/79 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: change in mean (SD): VC 0.1 (1.06) n=27; Control -0.2 (1.68) n=30 The Leicester Impact Scale 1 study: Median (IQR): VC 2 (0.00 to 5.0) n=79; Control 1.5 (0.0 to 5.0) n=75 **Bladder training versus no treatment** <u>Cure rate - not meta-analysed</u> 1 study: BT 7/60; Control 2/63, OR 4.03 (0.80, 20.23) <u>Improvement - not meta-analysed</u> 1 study: BT 45/60; Control 15/63, OR 9.60 (4.22, 21.87) <u>Quality of life - not meta-analysed</u>	Trial, ClinicalTrials.gov, UKC RN Portfolio Databas 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy reported in appendices 2.4 Yes - no restrictions on language or publication date 2.5 Probably yes - Titles and abstracts were screened by one reviewer. Full texts were independently assessed by two reviewers. Any disagreements were resolved by consensus or arbitration by a third person. **Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - One reviewer extracted data and another reviewer checked the extracted data. Any disagreements that could not be resolved by discussion were referred to an arbiter. A data extraction form was

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Electrical nerve stimulation (for example sacral nerve) was excluded			Incontinence impact questionnaire (0-3) 1 study: Mean (SD): BT 0.25 (0.29) n=39; Control 0.5 (0.59) n=39 **PFMT and ES versus no treatment** <u>Cure rates</u> 2 studies: PFMT+ES 13/78; Control 10/77, OR 1.76 (0.27, 11.54) <u>Improvement rates</u> 2 studies: PFMT+ES 52/58: Control 32/50, OR 8.39 (1.87, 40.32) <u>Adverse events - not meta-analysed</u> 1 study: PFMT+ES 4/67; Control 0/67 <u>Quality of life - not meta-analysed</u> Incontinence Impact Questionnaire 1 study: PFMT+ES n=67; Control n=67, No difference between groups **PFMT versus ES** <u>Cure rates</u> 5 studies: PFMT 15/62; ES 7/62, OR 2.65 (0.82, 8.60) <u>Improvement rates</u> 6 studies: PFMT 69/92; ES 57/98, OR 2.18 (0.76, 6.28) <u>Adverse events - not meta-analysed</u>	developed. Unclear if this was piloted. 3.2 Yes - full included studies tables with all important characteristics at the end of the report 3.3 Probably yes - reports that there was often ambiguity in terms of the reported data from studies. Where possible reported data was used, and did not make the assumption that missing data represented failed treatment 3.4 Probably yes - The assessment used the adapted version of a checklist developed by the Cochrane Incontinence Group 3.5 Probably yes - Two reviewers independently assessed all of the studies that met selection criteria for potential risk of bias. **Domain 4: Synthesis and findings: High**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study: PFMT 0/29; Control 10/32 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: Change in mean (SD) PFMT 0.6 (1.02) n=25; ES 0.6 (1.02) n=25 **PFMT with/without BF versus VC** <u>Cure rate: PFMT versus VC</u> 3 studies: PFMT 6/121; VC 11/124, OR 0.61 (0.09, 3.95) <u>Improvement rates: PFMT versus VC</u> 5 studies: PFMT 110/167; VC 108/164, OR 1.01 (0.52, 1.95) <u>Cure rate: PFMT+ BF versus VC</u> 1 study: PFMT+BF 12/30; VC 7/16, OR 0.86 (0.25, 2.93) <u>Improvement rates: PFMT+BF versus VC</u> 1 study: PFMT+BF 16/30; VC 8/16, OR 1.14 (0.34, 3.85) <u>Adverse events: PFMT versus VC - not meta-analysed</u> 1 study: PFMT 0/29; VC 18/29 1 study: not defined 1 study: PFMT 2/79; VC 2/80 <u>Adverse events: PFMT+BF versus VC - not meta-analysed</u> 1 study: PFMT+BF 0-30; VC 14/30	4.1 Probably yes - number of studies in the PRISMA diagram matches number of studies that there are outcomes for 4.2 No information 4.3 Yes - meta-analysis was appropriate for the RCT studies included. A random effects model was used or all analyses due to variability in the characteristics of included studies. Appropriate weighting was used 4.4 Probably yes - a random effects model is used. However, where there is still heterogeneity, forest plots do not have any subgroup sensitivity analyses, although potential reasons for heterogeneity is discussed in the narrative synthesis and describes sensitivity analyses that is removing studies believed to be the cause 4.5 No information - no mention of funnel plots. No mention of sensitivity analyses in regard to robustness. Publication bias

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Quality of life: PFMT versus VC - not meta-analysed Social Activity Index 1 study: Change in mean (SD): PFMT 0.6 (1.02) n=25; VC 0.1 (1.06) n=27 King's Health Questionnaire 1 study: change in mean (SD): PFMT 8.13 (9.06) n=16; VC 7.03 (7.74) n=30 The Leicester Impact Scale 1 study: Median (IQR): PFMT 2 (0-5) n=77; VC 2 (0-5) n=79 Quality of life: PFMT+BF versus VC - not meta-analysed King's health questionnaire 1 study: change in mean (SD): PFMT+BF 6.14 (6.2) n=22; VC 7.03 (7.74) n=30 **PFMT with/without BF versus bladder training** Cure rate: PFMT versus BT 1 study: PFMT 19/40; BT 9/35, OR 2.61 (0.98, 6.96) Cure rate: PFMT+BF versus BT 1 study: PFMT+BF 8/64; BT 12/68, OR 0.67 (0.25, 1.76) Improvement: PFMT+BF versus BT 1 study: PFMT+BF 48/63; BT 43/66, OR 1.71 (0.79, 3.70) Quality of life: PFMT versus BT - not meta-analysed ICIQ-UI SF	was not formally assessed in the analysis, as the number of studies available for each comparison was very limited 4.6 Probably no - risk of bias was assessed using a recommended tool. No mention of sensitivity analysis with respect to trial quality. **Phase 3: Judging risk of bias: Low?** A. Probably no - discusses heterogeneity of studies, but makes no reference to possible publication bias, although grey literature was searched for so this should be minimised. B. Yes - included studies are directly relevant to the question. C. Yes - results are discussed based on the primary analysis and includes both significant and non significant result

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study: median (IQR): PFMT 5 (4) n=43; BT 8 (7) n=41 <u>Quality of life: PFMT+BF versus BT - not meta-analysed</u> Urogenital distress inventory 1 study: mean (SD): PFMT+BF 81.2 (36.6) n=45; BT 99.2 (54.4) n=47 Incontinence Impact questionnaire 1 study: mean (SD): PFMT+BF 43.5 (47.4) n=45; BT 68.4 (69.7) n=47 **Electrical stimulation versus vaginal cones** <u>Cure rates</u> 2 studies: ES 5/55; VC 4/51; OR 1.00 (0.26, 3.91) <u>Improvement rates</u> 3 studies: ES 55/71; VC 50/70; OR 1.30 (0.59, 2.84) <u>Adverse events - not meta-analysed</u> 1 study: ES 10/32; VC 18/29 1 study: ES 4/36; VC 5/33 <u>Quality of life - not meta-analysed</u> Social Activity Index 1 study: Change in mean (SD): ES 0.6 (1.02) n=25; VC 0.1 (1.06) n=27 **PFMT with/without BF versus PFMT with/without BF plus electrical stimulation**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Cure rates: PFMT vs PFMT + BF 4 studies: PFMT 22/104; PFMT+ES 22/108; OR 1.02 (0.29, 3.55) Improvement rates: PFMT vs PFMT + ES 3 studies: PFMT 65/79; PFMT+ES 68/81; OR 0.84 (0.34, 2.07) Improvement rates: PFMT +BF vs PFMT + BF + ES 2 studies: PFMT+BF 21/33; PFMT+BF+ES 46/69; OR 0.86 (0.36, 2.08) Adverse effects: PFMT versus PFMT + ES 1 study: PFMT 0/66; PFMT+ES 4/67 Quality of life: PFMT versus PFMT+ES 1 study: PFMT no difference n=66; PFMT+ES no difference n=67 **PFMT versus PFMT + vaginal cones** Cure rate 1 study: PFMT 3/25; PFMT+VC 5/21; OR 0.44 (0.09, 2.10) Improvement rate 1 study: PFMT 12/25; PFMT+VC 11/21; OR 0.84 (0.26, 2.68) **PFMT + BF versus PFMT + BF + BT**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Cure rate 1 study: PFMT+BF 8/64; PFMT+BF+BT 16/61; OR 0.32 (0.13, 0.79) Improvement rate 1 study: PFMT+BF 48/63; PFMT+BF+BT 55/61; OR 0.35 (0.13, 0.97) Quality of life Urogenital Distress inventory 1 study: mean (SD): PFMT+BF 81.2 (39.6) n=45; PFMT+BF+BT 63.2 (49.2) n=44 Incontinence Impact Questionnaire 1 study: Mean (SD): PFMT+BF 43.5 (47.4) n=45; PF+BF+BT 52.3 (73.4) n=44 **PFMT + ES versus ES** Cure rate 1 study: PFMT+ES 3/11; ES 1/11; OR 3.75 (0.33, 43.31) Improvement rate 1 study: PFMT+ES 7/11; ES 3/11; OR 4.67 (0.77, 28.47) **PFMT + VC versus VC** Improvement rate 1 study: PFMT+VC 14/15; VC 14/19; OR 5.00 (0.52, 48.46) **PFMT+BF+BT versus BT** Cure rate 1 study: PFMT+BF+BT 19/61; BT 12/68; OR 2.11 (0.92, 4.82)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Improvement rate 1 study: PFMT+BF+BT 55/61; BT 43/66; OR 4.90 (1.84, 13.10) Quality of life Urogenital Distress Inventory 1 study: mean (SD): PFMT+BF+BT 63.2 (49.2) n=44; BT 99.2 (54.4) n=47 Incontinence impact questionnaire 1 study: mean (SD): PFMT+BF+BT 52.3 (73.4) n=44; BT 68.4 (69.7) n=47 **Strength and motor learning PFMT versus motor learning PFMT** Cure rate 1 study: 123 participants, OR 0.24 (0.03, 2.23) Improvement rate 1 study: 123 participants; OR 1.69 (0.67, 4.25) **PFMT (maximal contraction) + BF versus PFMT (submaximal contraction) + BF** Cure rate 1 study: 32 participants; OR 1.80 (0.39, 8.22) **PFMT + perineometer versus PFMT + urethral conductance** cure rate	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				1 study: 27 participants; OR 1.09 (0.13, 9.12) Improvement rate 1 study: 20 participants; OR 1.17 (0.26, 5.29) **PFMT+BF+ES (faradism) versus PFMT+BF+ES (inferential)** Improvement rate 1 study: 39 participants; OR 1.38 (0.29, 6.60) **PFMT+BF+ES (maximal) versus PFMT+BF+ES (low)** Improvement rate 1 study: 39 participants; OR 4.44 (1.08, 18.36)	
Full citation Liang, J., Fang, S., Li, W., Zhao, L., Sun, X., Xie, Z., Comparative effectiveness of nonsurgical treatment for stress urinary incontinence in adult women: A systematic review and network meta-analysis of randomized controlled trials,	**Sample size** 17 studies N=880 women **Characteristics** Diagnosis of incontinence • Urodynamics (UD) (6 studies) • Clinical and/or UD (2 studies) • Clinical (7 studies)	**Interventions** • PFMT versus electrical stimulation (2 studies) • PFMT versus vaginal cones (4 studies) • Electrical stimulation versus vaginal cones (2 studies) • Vaginal cones versus biofeedback (1 study) • PFMT versus PFMT + biofeedback (8 studies)	**Details** Relative EEs from NMA are presented as median differences with a credible interval (CrI) of 95%, which could be regarded as the conventional mean difference (MD) and confidence interval (CI), respectively EEs of NMA were displayed as forest plots in terms of not only binary but also continuous outcome.	**Results** **Network Meta-analysis results** **Quality of Life - ICI-Q-SF (mean, 95%CI and 95%PrI)** • BF + PFMT: 0.14 (-5.11, 5.39) (-15.06, 15.34) • ES vs PFMT 6.96 (3.72, 10.20) (-5.23, 19.16) • PFMT+BF vs PFMT -0.15 (-2.43, 2.12) (-11.25, 10.94) • VC vs PFMT: -0.01 (-2.64, 2.62) (-11.48, 11.45)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: adult women with SUI

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
International journal of clinical and experimental medicine, 11, 10397-10416, 2018 **Ref Id** 1174578 **Country/ies where the study was carried out** China **Study type** Systematic review **Aim of the study** To explore the most effective nonsurgical therapy to treat stress urinary incontinence (SUI) **Study dates** The date of the most recent searches was 31 August 2017	• UD and pad test (2 studies) **Inclusion criteria** • RCT study design • No less than 2 arms of various therapies • Patients with SUI • Studies exploring effect estimates via comparison of nonsurgical methods in women with SUI according to the UI questionnaire (ICI-Q-SF) were included in the meta-analysis **Exclusion criteria** • Cases, case series, letters, narratives, and systematic reviews • Studies that failed to distinguish UUI from SUI		Surface under the cumulative ranking (SUCRA) values were evaluated to determine if a certain therapeutic method is optimal than other methods. However, it did not actually mean that it was appropriate to apply this method to patients with other crucial clinical features, which were not included in the analysis.	• ES vs BF: 6.82 (1.24, 12.40) (-8.93, 22.58) • PFMT+BF vs BF: -0.29 (-6.02, 5.43) (-16.29, 15.70) • VC vs BF: -0.15 (-4.70, 4.39) (-14.21, 13.91) • PFMT+BF vs ES: -7.12 (-11.08, -3.16) (-20.30, 6.06) • VC vs ES: -6.97 (-10.21, -3.74) (-19.17, 5.22) • VC vs PFMT+BF: 0.14 (-3.34, 3.62) (-12.37, 12.65) PFMT (n=122), BF (n=49), combination of both PFMT and BF (n=91), VC (n=76), and ES (n=64)	2. Intervention: non-surgical methods 3. Comparison: each other 4. Outcomes: ICI-Q-SF **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably no - Aim of the study is stated clearly. No mention of a protocol. Eligibility criteria is missing detail 1.2 Probably yes - eligibility criteria seem appropriate for the aim of the review however lacking sufficient detail 1.3 No - criteria is lacking details regarding population (definition of SUI, how this should be diagnosed, definition of adult), and intervention/comparison (no definition of what is included

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding Zhejiang Provincial Institute of Chinese Medicine Science and Technology Plan Key Research Project					under 'non-surgical methods') 1.4 Probably no - there are some restrictions on population with no justification 1.5 Yes - there were no restrictions in terms of language or publication time **Domain 2: Identification and selection of studies: High** 2.1 Probably no - MEDLINE and cochrane databases were searched. EMBASE was not used. Cochrane searched although systematic reviews were excluded 2.2 No information 2.3 Yes - full search strategy reported in appendices 2.4 Yes - no restrictions on language 2.5 Yes - Two researchers independently carried

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					out primary screening by browsing titles and abstracts. Full texts were then assessed. A discussion was carried out when there was disagreement, which was managed via consensus. **Domain 3: Data collection and study appraisal: High** 3.1 Probably no - Two review authors independently undertook data extraction. No mention of the data extraction form used. No mention of cross checking. 3.2 Probably yes- a table of characteristics of included studies is reported, however this is lacking some information for example age of participants, details of the interventions/comparisons 3.3 Probably no - outcome required was the ICI-Q-SF. Unclear what approach was used if this data was missing.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					3.4 Yes- quality assessed using Cochrane's risk of bias tool 3.5 No information **Domain 4: Synthesis and findings: High** 4.1 Unclear - results are reported in terms of the comparisons rather than individual studies, so unclear if all included studies contribute to the results 4.2 No information 4.3 Probably no - meta-analysis for comparisons of at least 2 studies was appropriate, however this is displayed in a forest plot of all the different comparisons, rather than for each study, with 1 forest plot per comparison. NMA is used, however unclear if there are enough studies for each comparison for this to be stable 4.4 Unclear - methods section states that where there is significant heterogeneity, a random effects model was applied,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					however this data isn't reported so unclear if this was done 4.5 Yes - funnel plots are included and show no significant publication bias 4.6 Probably no - risk of bias was assessed using a recommended tool. No sensitivity analysis regarding RoB assessments was carried out **Phase 3: Judging risk of bias: High** A. Probably no - briefly mentions some of the identified issues, such as methodological quality, but no mention of measures that could have been done or how these limitations may have impacted the results B. Probably no - included studies are directly relevant to the question, however relevance is not discussed C. Yes - results are discussed based on the primary analysis and includes both significant and non significant results

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Lim, R., Lee, S. W., Tan, P. Y., Liong, M. L., Yuen, K. H., Efficacy of electromagnetic therapy for urinary incontinence: A systematic review, Neurourology & Urodynamics, 34, 713-22, 2015 **Ref Id** 542515 **Country/ies where the study was carried out** Malaysia **Study type** Systematic review **Aim of the study** To review whether patients with urinary incontinence (UI) treated with magnetic stimulation (MS) have a higher	**Sample size** 8 studies N=494 women **Characteristics** Three studies focused on SUI only, two studies included UUI only, two studies on MUI, and one study on overactive bladder (OAB) Mean age ranged from 50.1 to 65.2 years. **Inclusion criteria** Studies were eligible if they were randomized, blinded and sham-controlled, using MS for UI. Where there were duplicates in congress abstracts and published journals, the data was crosschecked to verify equivalence, and the most up-to-date or complete publications were chosen **Exclusion criteria** Not stated	**Interventions** • Magnetic stimulation versus sham (8 studies) Specific intervention details included: • 5 sec/min for 30 min; 50% of maximum output, 15Hz, once only • 15 min, 3 days a week for 2 weeks; 60% intensity; 15 Hz, 3 sec • 10 min stimulation, 3 min rest, 10 min stimulation, maximum tolerated intensity, 10 Hz, 50 Hz • 5 sec/min for 30 min; 50% of maximum output, 15Hz, once only • 25 min, twice weekly for 6 weeks, maximum tolerable intensity, 10 Hz 300us • Daily for 2 months, 230uT, 10 Hz, 10 us • Daily for 2 months, 10uT, 18.5 Hz • 20 min/day for 12 weeks, intensity not stated, 5-20 Hz, 1ms	**Details** Meta-analysis was performed using Review Manager software v.5.2 (Cochrane Collaboration, Oxford, UK). Random effects models were used to produce an across study risk ratio with a 95% confidence interval (CI). Statistical heterogeneity between studies was assessed using x2 test and I 2 statistic and the source of heterogeneity explored if present.	**Results** **Continence** Fujishiro, 2000 Number complete: active 4; sham 1 Number improved: active 23; sham 10 But 2005 Number improved: active 24; sham 5 But 2003 Number improved: active 18; sham 7 Number improved: Meta-analysed outcome 3 studies: Active 65/84; sham 22/69; RR 2.29 (1.60, 3.29)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: All adult patients with urinary incontinence (although only studies with women were identified) 2. Intervention: magnetic stimulation 3. Comparison: sham magnetic stimulation 4. Outcomes: proportion of patients who were continent at the end of study and treatment effect on QOL **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably yes - the objectives are clearly stated, and PICO is provided.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
continence rate compared to sham **Study dates** March 2014 **Source of funding** No funding was sought for this study		Sham group • Stimulation with inactive device (5 studies) • Sham stimulating coil 91 study) • Thin deflective aluminium plate inserted in the chair (1 study) • 20.4% of the maximum flux density of active stimulation (1 study)			Protocol is registered on Prospero. 1.2 Probably yes - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail such as to how UI should be diagnosed, gender, age, definition of intervention and comparison 1.3 No - lacking some detail regarding the population and intervention 1.4 No information - no mention of restrictions however not much detail given regarding eligibility criteria 1.5 Probably yes - no restrictions on language or publication format. Restriction on date but this is justified **Domain 2: Identification and selection of studies: Low** 2.1 Yes - Medline, EMBASE, CINAHL, and the Cochrane

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Collaboration's Database of Systematic Reviews were searched 2.2 Probably yes - manual search of congress abstracts presented at the International Continence Society, American Urological Association Annual Meeting and European Association of Urology from 2000 to 2014 2.3 Probably yes - full search strategy is included in supplementary material 2.4 No - restrictions for publication format and language 2.5 Probably yes - Two independent review authors screened titles/abstracts. Full-text articles of potentially relevant studies were independently assessed to confirm eligibility. No information regarding whether this was checked.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 3: Data collection and study appraisal: High 3.1 Probably no - Two independent authors extracted data using a standard extraction template. Any discrepancies were documented and resolved through discussion. No details given on cross checking, and no details provided about the data extraction form used and whether it was piloted or not. 3.2 Yes - full included studies tables are included 3.3 No information 3.4 Yes - Risk of bias was assessed using the Jadad score and the cochrane risk of bias assessment tool 3.5 Probably yes - studies were evaluated independently for their quality. No further details. **Domain 4: Synthesis and findings: High**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.1 Yes - all included studies report outcomes that contribute to the review 4.2 Probably no - protocol outlines strategy for data synthesis - narrative reporting of results and summary statistics for each study. Funnel plots were planned, and no subgroup analysis was planned. Review reports that meta-analysis was performed which is a deviation from the protocol without explanation 4.3 Probably no - Meta-analysis was performed using random effects model regardless of heterogeneity. 4.4 Probably no - heterogeneity was assessed but unclear whether causes were explored. Forest plot is only presented for one outcome which does not show heterogeneity 4.5 Probably no - no sensitivity analyses or funnel plots to explore/demonstrate robustness 4.6 No - quality of studies were analysed using a valid

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					tool (cochrane risk of bias assessment tool), most were judged at low or unclear risk of bias. No sensitivity analyses were carried out to explore impact of quality **Phase 3: Judging risk of bias: High** A. No - the does not discuss issues relating to selection of studies or synthesis of findings B. Probably no - included studies are directly relevant to the question, but doesn't discuss whether the data is generalisable/applicable to the population of interest C. Yes - outcomes are reported for all studies including both significant and non significant findings
Full citation Moroni, R. M., Magnani, P. S., Haddad, J. M., Castro Rde, A., Brito, L. G., Conservative Treatment of Stress Urinary Incontinence: A	**Sample size** 37 studies N=964 women **Characteristics** **Inclusion criteria** • Randomised controlled trials	**Interventions** • PFMT versus no treatment (2 studies) • Group PFMT versus individual PFMT (2 studies) • Intravaginal electrical stimulation versus control (2 studies)	**Details** Through meta-analyses, the authors pooled measures of single outcomes reported by different studies that addressed similar comparisons between conservative treatment methods.	**Results** **Incontinence specific Quality of Life** PFMT versus control 2 studies, PFMT n=34, control n=33, SMD -1.24 (-1.77, -0.71) King's Health Questionnaire (KHQ) and IIQ-7	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance**

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic Review with Meta-analysis of Randomized Controlled Trials, Revista Brasileira de Ginecologia e ObstetriciaRev, 38, 97-111, 2016 **Ref Id** 1174617 **Country/ies where the study was carried out** Brazil **Study type** Systematic review **Aim of the study** to pool randomised trials which compared multiple forms of conservative treatment (alone or in association) betw een each other, with control groups or surgical	• adult women, aged 18 years or older, with a clinical diagnosis of SUI (complaint, and/or an observation during examination of urinary leakage due to effort or straining), with absence of neurological injuries or diseases • any forms of conservative treatment for SUI, compared against each other, either alone or in combination with one another **Exclusion criteria** • Other study designs (such as cohorts, case-controls, quasi-randomised trials) • women with urgency urinary incontinence or mixed urinary incontinence • treatments or devices unavailable in Brazil	• Superficial electrical stimulation versus control (2 studies) • Vaginal cones versus control (2 studies) • PFMT versus vaginal cones (2 studies) • Electrical stimulation versus vaginal cones (2 studies) Other comparisons reported but not relevant for this review.	Pooled data were expressed graphically through forest-plots, in which an increase in the measure of an outcome is shown to the right of the central line, and such an increase may be beneficial (such as an increase in a certain quality of life scale score) or harmful (such as an increase in the number of episodes of incontinence). The authors chose to pool the studies in which the interventions were actually comparable and in which the study groups were also comparable before the interventions. Statistical heterogeneity was evaluated, expressed by the I2 value for each meta-analysis; heterogeneity was considered elevated when higher than 50%. In situations of elevated heterogeneity, the individual studies were reevaluated to assure that the interventions	<u>Group PFMT versus individual PFMT</u> 2 studies, Group n=45, Individual n=45, MD 7.96 (-2.69, 18.60) King's Health Questionnaire (KHQ) <u>Intravaginal electrical stimulation vs control</u> 2 studies, IES n=42, control n=39, SMD -1.44 (-1.94, -0.95) KHQ and I-QoL scales <u>Superficial electrical stimulation versus control</u> 2 studies, SES n=22, control n=22, MD -50.51 (-66.77, -3425) KHQ scale <u>Vaginal cones versus control</u> 2 studies, vaginal cones n=39, control n=39, MD -28.51 (-38.89, -18.41) KHQ and the I-QoL scales <u>PFMT versus vaginal cones</u> 2 studies, PFMT n=29, vaginal cones n=39, MD -0.56 (-8.40, 7.28) Scales not reported <u>Intravaginal electrical stimulation versus vaginal cones</u> 2 studies, IES n=51, vaginal cones n=45, MD 9.31 (2.77, 15.86) I-QoL scale	1. Patients: adult women, aged 18 years or older, with a clinical diagnosis of SUI (complaint, and/or an observation during examination of urinary leakage due to effort or straining), with absence of neurological injuries or diseases. Urodynamic diagnosis of SUI was not considered necessary for inclusion 2. Intervention: any forms of conservative treatment for SUI 3. Comparison: conservative treatments were compared against each other either alone or in combination 4. Outcomes: incontinence-related quality of life; objective measure of incontinence, quantified in grams through pad-tests; number of incontinence episodes, measured through bladder diaries; Subjective improvement; general quality of life; adverse events

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
treatments, emphasising treatment options that are available in Brazil due to the lack of guidelines for these practitioners **Study dates** Date of search May 10 2015 **Source of funding**			and populations were comparable. If they were indeed similar, a random effects meta-analyses was chosen.		**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Yes - there is a protocol of this systematic review on Prospero. Objectives are clearly stated. 1.2 Probably yes - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail 1.3 No - important details are missing regarding the intervention and comparison - no definition of conservative treatment 1.4 Yes - restrictions seem appropriate (UUI or MUI) and sufficient justification is given 1.5 Probably yes - there were no restrictions on language or year of publication. No information regarding publication format

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 2: Identification and selection of studies: Low 2.1 Probably yes - Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, and LILACS were searched. Embase was not searched 2.2 No information 2.3 Probably yes - search terms are include with how they were combined however it is unclear if these are complete 2.4 Probably yes - no restrictions for language 2.5 Probably yes - Two study authors performed the initial screening independently, by reading titles and abstracts and locating potentially eligible entries. Then, the same two authors obtained and independently assessed the full text of each study. Any disagreements between the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					two authors were resolved by consulting a third author **Domain 3: Data collection and study appraisal: High** 3.1 Yes - Two authors performed data extraction independently by using a data extraction form developed and pilot-tested by the authors 3.2 Yes - Included studies tables are included which have all necessary details and information 3.3 Probably no - the mean difference was calculated for continuous outcomes, and RR for binary outcomes. SMD was used for multiple scales. No information on how results data that were not reported in the format required for synthesis were obtained - although states in the protocol that authors will be contacted, but unclear if this did happen. Discussion states that studies that did not report their outcomes in a way that could be used to perform meta analyses,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					were reported in a descriptive way 3.4 Probably no - Risk of bias was assessed using the Jadad which does not have a measure of allocation concealment 3.5 Probably yes - Two authors independently assessed the methodological quality of the studies. The two authors resolved disagreements through discussion or by consulting a third author **Domain 4: Synthesis and findings: High** 4.1 Probably yes - number of studies is PRISMA matches number of studies reporting outcomes 4.2 Yes - protocol states that meta-analyses was planned for studies with similar comparisons 4.3 Probably yes - Meta-analysis for similar comparisons is appropriate.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Appropriate weighting is used and random model used when there is unexplained heterogeneity 4.4 Probably yes - heterogeneity was assessed and a random model was used when I2 was too high. No subgroup analyses were used to explore heterogeneity 4.5 Probably no - states that funnel plots would be generated in protocol but these aren't in main report or supplementary materials 4.6 Probably yes - only studies with a Jadad score of 3 or more were included **Phase 3: Judging risk of bias: High** A. No - not all limitations are discussed B. Probably no - included studies are directly relevant to the question, but doesn't discuss whether the data is generalisable or relevant

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					C. Yes - outcomes are reported for all studies including both significant and non significant findings
Full citation Nie, X. F., Ouyang, Y. Q., Wang, L., Redding, S. R., A meta-analysis of pelvic floor muscle training for the treatment of urinary incontinence, International Journal of Gynaecology & ObstetricsInt J Gynaecol Obstet, 138, 250-255, 2017 **Ref Id** 939138 **Country/ies where the study was carried out** China **Study type** Systematic review	**Sample size** 12 studies N=763 women **Characteristics** Three studies did not clarify the type of UI; three studies included both SUI and MUI; and six studies included only SUI. Eight studies confirmed the type of UI with urodynamic examination. Two studies confirmed the eligibility of the participants by asking them two specific UI related questions. Two studies confirmed the type of UI using the International Consultation on Incontinence Questionnair.e Short-Form (ICIQ-SF) tool. Mean age in the included studies ranged from 46 to 76.	**Interventions** • PFMT versus no treatment (12 studies) No further details provided	**Details** The data were analyzed using RevMan version 5.3 (Cochrane, London, UK) to generate a pooled effect size and 95% confidence interval (CI). Heterogeneity across the studies was examined using the I2 statistic.14 When statistically significant heterogeneity was found (P<0.05 and I2>50%), a random-effects model was used to provide the most conservative estimate. If statistically significant heterogeneity was still found when using the random-effects model, the reasons for such heterogeneity were identified and investigated, and a subgroup analysis undertaken	**Results** **PFMT versus no treatment** IIQ-7 2 studies, 154 participants, SMD 2.20 (-4.12, -0.27) ICIQ 1 study, 48 participants, SMD -1.81 (-3.24, -0.38) UDI-6 2 studies, 154 participants, MD -7.5 (-10.41, -4.58) Quality of life (general quality of life scale, and Incontinence quality of life questionnaire) 2 studies, 105 participants, SMD 1.67 (0.41, 2.94)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Women aged 18 years or older with symptoms of stress urinary incontinence, with or without urgency urinary incontinence; non- pregnant and no reports of pelvic organ prolapse, low back pain, spinal or pelvic fracture, urinary tract infection, vaginal infection, history of pelvic surgery, history of pelvic floor muscle training (PFMT), surgery, or other treatments for urinary incontinence. 2. Intervention: PFMT alone or with pamphlet guidance

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To assess the effects of pelvic floor muscle training (PFMT) among women with UI **Study dates** August 15, 2016 **Source of funding**	**Inclusion criteria** • Design: Full-text articles of randomized controlled trials or quasi-experimental design studies • Participants: Women aged 18 years or older with symptoms of stress urinary incontinence, with or without urgency urinary incontinence; non-pregnant and no reports of pelvic organ prolapse, low back pain, spinal or pelvic fracture, urinary tract infection, vaginal infection, history of pelvic surgery, history of pelvic floor muscle training (PFMT), surgery, or other treatments for urinary incontinence. • Intervention: Use of PFMT alone or with pamphlet guidance. • Control group: No treatment or receiving only pamphlet guidance without supervision.				3. Comparison: No treatment or receiving only pamphlet guidance without supervision 4. Outcomes: Effects of urinary incontinence measured using the Incontinence Impact Questionnaire- 7, International Consultation on Incontinence Questionnaire, or Urogenital Distress Inventory- 6; frequency of urinary incontinence; stress pad test; quality of life; strength and pressure of the pelvic floor muscles. **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably no - the objectives are clearly stated, and PICO is provided. There is no mention of a protocol and a protocol couldn't be located by searching the cochrane library

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Outcome measures: Effects of urinary incontinence measured using the Incontinence Impact Questionnaire-7, International Consultation on Incontinence Questionnaire, or Urogenital Distress Inventory-6; frequency of urinary incontinence; stress pad test; quality of life; strength and pressure of the pelvic floor muscles **Exclusion criteria** • Intervention that included PFMT combined with electric and biofeedback treatment, medication, or vaginal ball therapy • Review articles and meta-analysis				1.2 Yes, the eligibility criteria is appropriate to answer the review question 1.3 Probably no - the criteria are well defined but lacking details about the intervention and how SUI should be diagnosed 1.4 Probably no - there are some restrictions and these are not justified 1.5 Probably no - language restriction **Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - The Cochrane Library, PubMed, and Web of Science. Neither Medline or Embase were searched 2.2 Yes - Relevant references cited in full papers were also searched. 2.3 Probably yes - search terms are described

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					including how they were combined 2.4 No - restrictions for publication format and language with no justification 2.5 Probably yes - Titles and abstracts of the identified reports were reviewed for relevance to the defined objectives of the present study by two authors with discrepancies resolved by discussion. **Domain 3: Data collection and study appraisal: High** 3.1 Probably yes - A standardised data extraction form was used, unclear if this was piloted. Data was extracted by one author and cross checked by a second. 3.2 Yes - full included studies tables are included in supplementary material 3.3 Probably no - Data required to generate a

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					pooled effect size and 95% CI. No further details 3.4 Probably yes- Risk of bias was assessed according to the 2011 Cochrane guidelines. Unclear how many authors were involved in this stage 3.5 No information **Domain 4: Synthesis and findings: High** 4.1 Yes - number of studies included matches number of studies with results 4.2 No information 4.3 Probably yes - meta-analysis was done where appropriate. Fixed model was used where there was no heterogeneity and a random effects model was used where there was heterogeneity. Subgrouping was appropriate and appropriate weighting is used.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.4 Yes - a random effects model was used where there was heterogeneity. If there was still heterogeneity, this was investigated with subgroup analysis. 4.5 No information 4.6 Yes - all studies were judged to be high quality **Phase 3: Judging risk of bias: High** A. Probably no- the discussion talks about the limitations of English language only studies, and the issue of heterogeneity. But no discussion of robustness or lack of protocol B. Probably yes - included studies are directly relevant to the question, and discusses how the studies conducted in high income regions may limit the applicability C. Yes - outcomes are reported for all studies

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Oblasser, C., Christie, J., McCourt, C., Vaginal cones or balls to improve pelvic floor muscle performance and urinary continence in women post partum: A quantitative systematic review, Midwifery, 31, 1017-25, 2015 **Ref Id** 541172 **Country/ies where the study was carried out** UK **Study type** Systematic review **Aim of the study** To compare the effectiveness of vaginal cones or balls for improvement of	**Sample size** 1 study N=230 women **Characteristics** Women with symptoms of incontinence three months post partum **Inclusion criteria** Types of studies • Randomised and quasi-randomised controlled trials with individual or cluster randomisation a nd parallel design Types of participants • Women up to one year after childbirth at the time of beginning the intervention, of any parity, mode of birth and birth injuries, with or without urinary incontinence Types of intervention • Vaginal use of cones or balls. ○ cone or ball use of any frequency and duration, and of any method (combined	**Interventions** The 1 included study had several intervention groups of which the following 2 comparisons were reported: • Vaginal cones versus PFMT (1 study) • Vaginal cones versus control (standard postpartum care) (1 study) Enforced exercise regimen with physiotherapist with one training session and three follow-up visits at three, six, and nine months post partum; factorial design with three subgroups (PFME, cones, and both). The set of cones used consisted of nine cones of identical shape and volume but of increasing weight from 20 to 100 g. Each participant, starting with the heaviest weight she could retain without voluntary holding, was instructed to keep the cone in her vagina for 15 minutes twice a day. Once she was	**Details** Relative risks (RR) with 95% confidence intervals (CI) were calculated for dichotomous data, and differences in means (MD) with standard deviations (SD) for continuous data. As only one study was included, a data synthesis by meta-analysis was not possible and a narrative review was undertaken. However, a secondary analysis of raw data enabled to directly address the question of this systematic review.	**Results** Self-reported urinary incontinence (yes/no) (12 months) Cone group: 10/21 Control group: 69/91 Exercise group: 9/19 Cone group versus control group RR 0.63 (0.40-0.998) Cone group versus exercise group RR 1.01 (0.52-1.93) Self-reported u rinary incontinence (yes/no) (24-44 months) Cone group: 12/19 Control group: 20/37 Exercise group: 10.20 Cone group versus control group RR 1.27 (0.83-1.94) Cone group versus exercise group RR 1.37 (0.80-2.33)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: Women up to one year after childbirth at the time of beginning the intervention, of any parity, mode of birth and birth injuries, with or without urinary incontinence 2. Intervention: Vaginal use of cones or balls. 3. Comparison: physiological restitution (no device or treatment) or any form of pelvic floor muscle training, for example physiotherapy individually or in group, or pelvic floor muscle exercises at home 4. Outcomes: pelvic floor muscle performance, urinary (in)continence, determined, perineal descent or POP,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
pelvic floor muscle performance and urinary continence in the post partum period to no treatment, placebo, sham treatment or active controls; to gather information on effect on perineal descent or pelvic organ prolapse, adverse effects and economical aspects **Study dates** The searches took take place between 26 February and 28 September 2014 **Source of funding** Funded by a City University London Scholarship	with exercises or not), ○ cones or balls of any form, size, weight or brand, ○ with any method of instruction (advised by any health practitioner or self-taught by information material) Types of comparison • Comparison could be made with physiological restitution (no device or treatment) or any form of pelvic floor muscle training, for example physiotherapy individually or in group, or pelvic floor muscle exercises at home Types of outcome • Outcomes should be measured immediately after the intervention, or be longer-term follow-up data • Primary outcomes ○ pelvic floor muscle performance (for example strength, endurance), determined using a valid and reliable measure	successful on two consecutive occasions she proceeded to the next heaviest cone. Control group: standard postpartum pelvic floor care/muscle exercises: daily instruction by physiotherapist on pelvic floor muscle exercises in small groups (approximately six women) from the second postnatal day, or an audiotape at weekends, during hospital stay			adverse effects, health economics **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Yes - the objectives are clearly stated, and PICO is provided. Protocol is registered on Prospero. Minor modifications were made to the protocol, details and justifications are provided 1.2 Probably yes - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail such as to how UI should be diagnosed, age of participants 1.3 Probably no - lacking some details regarding the population 1.4 Probably no - some restrictions regarding

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	○ urinary (in)continence, determined using a valid and reliable measure • Secondary outcomes ○ Perineal descent or POP as assessed by clinical methods ○ Adverse effects as determined by each included study ○ Health economics There were no language, publication period or publication status restrictions. **Exclusion criteria** • Pregnant women, women with anal incontinence or major genitourinary/pelvic morbidity were excluded				population, no justification provided 1.5 Probably yes - no restrictions on language or publication format **Domain 2: Identification and selection of studies: Low** 2.1 Yes - The following databases were searched: Cochrane Central Register of Controlled Trials (CENTRAL), PubMed, Embase, Maternity and Infant Care Database, CINAHL, PEDro, POPLINE, AMED, Index Medicus for the South-East Asian Region (IMSEAR). For grey literature, Conference Proceedings Citation Index and ProQuest Dissertations & Theses Full Text were searched. For citation searching, SCOPUS, Web of Science and 'cited by' were searched. For ongoing studies, ICTRP was searched. 2.2 Yes - References of similar reviews and trial

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					reports identified for data extraction were screened to identify further relevant studies 2.3 Yes - full search strategy for Pubmed is included in the review 2.4 Yes - There were no language, publication period or publication status restrictions 2.5 No information - titles and abstracts of identified records were screened, followed by full text. Two reviewers checked eligibility. No further information provided **Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Data was extracted using a piloted extraction form. Data were extracted by the lead reviewer and cross-checked by the second reviewer.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					3.2 Yes - full included studies tables are included 3.3 Probably yes - Relative risks with 95% confidence intervals were calculated for dichotomous data, and differences in means with standard deviations for continuous data. Authors were contacted if there was any missing data, however unclear if this also applies to data not reported in the desired format 3.4 Yes - Risk of bias was assessed using the Cochrane risk of bias assessment tool 3.5 Probably yes - Assessments made by reviewers were compared and disagreements were resolved by consensus. **Domain 4: Synthesis and findings: Low?** 4.1 Yes - only 1 study was included and results for this study were reported in detail

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.2 Yes - meta-analysis was planned however as only 1 study was included this was not possible 4.3 Probably yes - Narrative analysis was carried out and a secondary analysis of raw data - this is appropriate given only 1 study was included 4.4 Probably yes - only 1 study so no heterogeneity 4.5 Probably yes- sensitivity analysis with a best/worse case scenario (single imputation) for urinary incontinence was performed to help determine the robustness of the results. 4.6 The study was judged to be high risk for 3 of the domains **Phase 3: Judging risk of bias: High** A. No - the does not discuss issues relating to selection of studies

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					B. Probably no - doesn't discuss whether the data is generalisable/applicable to the population of interest C. Yes - Both significant and non significant results of the study are reported
Full citation Peng, L., Zeng, X., Shen, H., Luo, D. Y., Magnetic stimulation for female patients with stress urinary incontinence, a meta-analysis of studies with short-term follow-up, Medicine, 98, e15572, 2019 **Ref Id** 1196953 **Country/ies where the study was carried out** China **Study type** Systematic review	**Sample size** 4 studies N=232 women **Characteristics** Inclusion criteria in the four studies was: • ≥1 episodes of leaks recorded in a 3-day voiding diary, 2 gm. or more urine loss on a 1-hour pad test, no disorders possibly causing any LUTs • ≥1 episodes of urine loss recorded in a 3-day voiding diary, 2g or more urine loss in a 1-h pad test or a positive standardized stress test • Women with urodynamic SUI refractory to PFMT for more than 12 weeks	**Interventions** • Magnetic stimulation versus sham (4 studies) Intensity in the four studies was 50% (1 study), 60% of maximum (1 study), and maximum (2 studies). Location was S3 roots (1 study), S2-S4 roots (1 study) and pelvic floor (2 studies). Frequency was 15Hz, 5s/min (1 study), 15Hz, 3s/m (1 study), 50Hz in 5-s on/5-s off cycles (1 study), and 50Hz in an 8-s on, 4-s off, 2 sessions/week. Duration was 30 minutes (1 study), 15 minutes (1 study), and 20 minutes (2 studies)	**Details** Review Manager 5.3 (Cochrane Collaboration, Oxford, UK) was used to perform all calculations and data manipulations. Heterogeneity was evaluated by I2 tests, with significance set at P<0.05. I2 values of 25%, 50%, and 75% corresponded to low, medium, and high levels of heterogeneity, respectively. The fixed-effect method was used for studies without significant heterogeneity, and random-effect method was used with I2 values ≥50%	**Results** <u>Quality of life scores</u> 3 studies, MS group n=59, sham group n=53, MD 0.42 (0.02, 0.82) <u>ICIQ scores</u> 3 studies, MS group n=101, sham group n=84, MD -4.60 (-5.02, -4.19)	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: women with SUI 2. Intervention: magnetic stimulation 3.Comparison: sham MS 4. Outcomes: urine loss on pad test, number of leaks, change in urodynamic parameters, improvement rate, QoL scores, ICIQ, KHQ scores, UTI, pain, discomfort, new depression,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To determine the efficacy of magnetic stimulation (MS) in female patients with stress urinary incontinence (SUI) by performing a meta-analysis on peer-reviewed randomised controlled trails **Study dates** July 2018 **Source of funding** This study was supported by the National Natural Science Fund of China and 1.3.5 project for disciplines of excellence, West China Hospital, Sichuan University	and who did not want to undergo surgery • Female aged ≥21 years old, demonstrated urine leak on coughing, had ICIQ-UI SF score of ≥6 points **Inclusion criteria** • Patients were diagnosed with SUI • Magnetic stimulation or sham therapy were used for SUI patients • Some outcome-reporting parameters were recorded in study • Where there were duplications in congress abstracts or published journals, the data were rechecked to verify equivalence, and the most up-to-date or complete studies were eligible • the primary outcomes of interest were considered as urine loss on pad test per day, number of leaks in a 3-day voiding diary, changes in urodynamic parameters,				influence on social life/personal relationships **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: High** 1.1 Probably no - the objectives are clearly stated, but there was no mention of a protocol. 1.2 Probably no - the eligibility criteria is appropriate to answer the review question, however is lacking sufficient detail about population (definition of SUI, age of women, diagnosis of SUI) and intervention/comparison (definitions of MS and sham MS) 1.3 No - lack of detail about various aspects of the criteria for example population and intervention 1.4 Probably no - there are some restrictions on

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	improvement rate, QoL scores, International Consultation on Incontinence Questionnaire (ICIQ) scores and KH scores (incontinence impact). UTI, pain, discomfort, new depression, influence on social life and personal relationship were regarded as the secondary endpoints to evaluate safety **Exclusion criteria** • The study type was a letter, review, comment, or case report • There was a lack of a comparative placebo-controlled group and quantitative data • Patients were diagnosed with mixed SUI or urgency urinary incontinence and undergoing several different treatments				population and these are not justified 1.5 No information **Domain 2: Identification and selection of studies: High** 2.1 Probably no - PubMed, Embase and Cochrane library were searched. Medline was not searched 2.2 Yes - relevant conference proceedings and literature references of the EAU, IUGA and ICS were manually searched 2.3 Probably yes - search strategies are included the review although unclear if the complete strategy is reported 2.4 No information 2.5 Probably no - 'evaluating the papers was conducted independently by two

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					authors', no more information provided **Domain 3: Data collection and study appraisal: High** 3.1 No information 3.2 Probably yes - included studies tables are included although missing some information such as age 3.3 No information 3.4 Yes - Risk of bias was assessed using the Cochrane Collaboration Reviewers Handbook 3.5 Unclear - quality assessment was performed by two authors - no further details **Domain 4: Synthesis and findings: High** 4.1 Probably yes - all included studies contribute to the meta-analysis, however according to the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					flow diagram, 6 studies should have been included in the qualitative analysis however no information on these 6 studies is provided 4.2 No information 4.3 Yes - Meta-analysis is appropriate given the homogeneity of comparisons and populations. Weighting is appropriate and models used are appropriate. 4.4 Probably no - if there was significant heterogeneity, a random effects model would have been used however there was no heterogeneity in any of the forest plots. However discussion states that one study was removed from the forest plot because it added heterogeneity, without considering the reasons for this or using prespecified sensitivity analyses 4.5 Probably yes - funnel plots were produced which showed no publication bias. 4.6 No - one study was judged to be high risk. There was no sensitivity analysis to

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					explore the effect of removing this study **Phase 3: Judging risk of bias: High** A. Probably no - some limited discussion of the issues identified B. Probably no - included studies are relevant to the question, but doesn't discuss whether the data is generalisable/any limitations of the studies in terms of applicability C. Yes - outcomes are reported for all studies
Full citation Stewart, F., Berghmans, B., Bø, K., Glazener, C. M. A., Electrical stimulation with non-implanted devices for stress urinary incontinence in women, Cochrane Database of	**Sample size** 35 studies N=3781 women The sample sizes ranged from 14 to 200 women (mean N = 67, median N = 56) **Characteristics**	**Interventions** • Electrical stimulation versus no active treatment (8 studies) • Electrical stimulation versus sham treatment (6 studies) • Electrical stimulation versus PFMT (9 studies) • Electrical stimulation versus vaginal cones (7 studies)	**Details** For dichotomous data, the risk ratio (RR) with a 95% confidence interval (CI) was calculated. For continuous data, the mean difference (MD) with a 95% CI was calculated. The standardised mean difference (SMD) was calculated to combine trials that	**Results** **Electrical stimulation versus no active treatment** Subjective cure 2 studies, 101 participants, RR 2.31 [1.06, 5.02] Subjective cure or improvement 5 studies, 347 participants, RR 1.73 [1.41, 2.11] Quality of life 4 studies, 250 participants, SMD -0.72 [-0.99, -0.45] Adverse events	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: adult women (18 years or older, or according

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic Reviews, 2017 **Ref Id** 939215 **Country/ies where the study was carried out** UK **Study type** Systematic review **Aim of the study** To assess the effects of electrical stimulation with non-implanted devices, alone or in combination with other treatment, for managing stress urinary incontinence or stress-predominant mixed urinary incontinence in women	Almost all trials included only women with stress urinary incontinence 9 trials included women with other kinds of incontinence: • 3 trials included some women with stress urinary incontinence alone and other with stress predominant MUI • 4 trials did not separate data according to type of incontinence, or excluded women with UUI • 2 trials did not define the type of incontinence One trial was restricted to women who had been referred for continence surgery. Two studies restricted inclusion based on age; over 60 years and over 40 years. The mean age in the included trials ranged from 41 to 69 years. Fourteen trials did not report age	• Electrical stimulation + PFMT versus PFMT (10 studies) Excluded comparisons: • Electrical stimulation versus PFMT and vaginal cones (2 studies) The included trials reported a range of different kinds of ES; most were intravaginal ES interventions, while others used surface electrodes. The intervention regimens were characterised by their wide diversity in terms of current, current intensity, pulse shape and duration, frequency (Hz), duty cycle, electrodes, and duration of treatment and its supervision. Inmost cases trialists failed to report at least one of these parameters. Fifteen trials compared ES plus another treatment to the other treatment alone	measure the same outcome but using different methods such as different quality of life instruments.	3 studies, 103 participants, RR 5.96 [0.30, 118.70] **Electrical stimulation versus sham treatment** Subjective cure 3 studies, 158 participants, RR 2.21 [0.38, 12.73] Subjective cure or improvement 5 studies, 236 participants, RR 2.03 [1.02, 4.07] Adverse effects 4 studies, 233 participants RR 2.01 [0.52, 7.67] **Electrical stimulation versus PFMT** Subjective cure 4 studies, 143 participants, RR 0.51 [0.16, 1.63] Subjective cure or improvement 7 studies, 244 participants, RR 0.85 [0.70, 1.03] Adverse effects 3 studies, 121 participants, RR 5.0 [0.25, 99.16] **Electrical stimulation versus vaginal cones** Subjective cure 3 studies, 157 participants, RR 1.04 [0.70, 1.54] Subjective cure or improvement 5 studies, 331 participants, RR 1.09 [0.97, 1.21]	to study authors' definitions of adult) with SUI or stress predominant MUI on the basis of symptoms, signs or urodynamic diagnosis. 2. Intervention: any method of delivering electrical stimulation with non-implanted devices 3. Comparison: no active treatment, placebo or sham treatment as well as drug therapy, surgery or any other intervention intended to decrease SUI, including conservative treatment (such as complementary therapies like acupuncture, pelvic floor muscle training (PFMT) and vaginal cones). Studies comparing different methods of ES were also included 4. Outcomes: cure and/or improvement, incontinence specific QoL, satisfaction with treatment, need for further treatment, QoL, quantification of symptoms, adverse effects, economic data, clinicians observations, PFM function, any other outcomes judged to be important

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates The date of the search was 10 February 2016 **Source of funding** National Institute for Health Research, UK	**Inclusion criteria** Types of studies • Parallel or cross-over RCTs, quasi-RCTs and cluster-randomised trials Types of participants • Adult women (18 years or older, or according to study authors' definitions of adult) with SUI or stress predominant MUI on the basis of symptoms, signs or urodynamic diagnosis. • Trials of participants with MUI, UUI and SUI were included only if the data for women with SUI were presented separately. • Trials in women with MUI were included if the condition was SUI-predominant Types of interventions • Any method of delivering electrical stimulation with non-implanted devices	• ES plus PFMT (16 studies) • ES plus behavioural training (1 study) • ES plus surgery (1 study) Six trials compared different types of ES to each other. One trial control group received a motivational phone call once a month for 6 months. One trial control group received 'any other therapy at the discretion of the investigator'. These were treated as no active treatment.		Quality of life 2 studies, 96 participants, MD 1.59 [-3.72, 6.90] **Electrical stimulation versus PFMT and vaginal cones** Subjective cure 2 studies, 123 participants, RR 1.45 [0.96, 2.20] Subjective cure or improvement 2 studies, 123 participants, RR 1.53 [1.08, 2.18] **Electrical stimulation plus PFMT versus PFMT** Subjective cure 3 studies, 99 participants, RR 0.76 [0.38, 1.52] Subjective cure or improvement 6 studies, 308 participants, RR 1.10 [0.95, 1.28] Quality of life 4 studies, 193 participants, SMD -0.35 [-0.64, -0.05]	**Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Yes - the objectives are clearly stated, and PICO is provided. Specific mention of protocol in methods section 1.2 Yes - the eligibility criteria is appropriate to answer the review question 1.3 Yes - the criteria are well defined and unambiguous 1.4 Probably yes - there are restrictions based on population and interventions, and these are not all justified, but do seem appropriate 1.5 Yes - No restrictions on language and publication status

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• These devices could be placed in the vagina or anus or on a skin surface • Eligible comparators were no active treatment, placebo or sham treatment as well as drug therapy, surgery or any other intervention intended to decrease SUI, including conservative treatment (such as complementary therapies like acupuncture, pelvic floor muscle training (PFMT) and vaginal cones • Studies comparing different ES methods were also included • There were no restrictions by type of device, stimulation parameters, duration of treatment, route of administration, or other factors Type of outcomes Primary outcomes • Cure • Cure or improvement				**Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - trials were identified from the Cochrane Incontinence Group Specialised Trials Register, which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, MEDLINE in-process, MEDLINE Epub Ahead of Print, ClinicalTrials.gov, WHO ICTRP. EMBASE was not searched 2.2 Yes - hand searching of journals and conference proceedings was carried out 2.3 Yes - full search strategy provided in appendices 2.4 Yes - no restrictions on date, publication format or language 2.5 Yes - Two review authors independently screened the trials identified by the literature search, resolving any disagreements by discussion or by referring

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	• Incontinence specific QoL Secondary outcomes • Satisfaction with treatment • Need for further treatment • QoL measures of general health status • Quantification of symptoms • Adverse effects • Economic data Tertiary outcomes • Clinicians observations • Pelvic floor muscle function, strength, or ability to contract pelvic floor muscles • Any other outcomes judged to be important when performing the review **Exclusion criteria** • studies in women with urgency-predominant MUI, UUI only, or incontinence associated with a neurologic condition or frailty • studies in men and women that did not				to a third party. **Domain 3: Data collection and study appraisal: Low** 3.1 Yes - Two review authors extracted data independently, resolving any disagreements by discussion or by referring to a third party. A standard data extraction form was used to extract data on study characteristics 3.2 Yes - full included studies tables are included for each study with all relevant details 3.3 Yes - For dichotomous data, the risk ratio with a 95% CI was calculated from the data. For continuous data, the mean difference with a 95% CI was used. The SMD was used to combine trials that measure the same outcome but using different methods 3.4 Yes - The risk of bias for the included studies was assessed using the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	report data separately by sex and studies including only men or children • trials of magnetic stimulation and electro-acupuncture • the comparator interventions, alone or as a supplement to ES, were different in the intervention and control arms				Cochrane Risk of Bias Assessment Tool 3.5 Yes - Two review authors independently carried out risk of bias assessments and resolved any disagreements by consulting a third author. **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies included matches number of studies with results 4.2 Yes - mention of a protocol. Methods section is rigorous. 4.3 Probably yes - meta-analysis was done where appropriate. Meta-analyses were carried out only for trials with similar interventions. Where there was heterogeneity, pre-specified subgroup analysis was performed. 4.4 Yes - Where there was significant heterogeneity (for example I^2 higher than 50%),

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					the authors computed pooled estimates of the treatment effect for each outcome using a random-effects model. Subgroup analysis was also planned if possible to investigate the heterogeneity. These sensitivity analyses were not presented in the results with the forest plots but discussed narratively 4.5 Probably no - there were not enough studies for each comparison to perform a funnel plot. Sensitivity analyses were performed exclude studies with different methods of inclusion, or at high risk of bias but only where there was heterogeneity. 4.6 Probably yes - risk of bias assessed thoroughly. The authors intended to perform sensitivity analysis comparing trials at low risk of selection bias to those at high risk but there were insufficient numbers of studies to do so.

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Phase 3: Judging risk of bias: Low A. Yes - No limitations identified B. Yes - included studies are directly relevant to the question. Conclusions reflect both significant and non significant findings C. Yes - outcomes are reported for all studies whether significant or not
Full citation Woodley, Stephanie J., Lawrenson, Peter, Boyle, Rhianon, Cody, June D., Mørkved, Siv, Kernohan, Ashleigh, Hay-Smith, E. Jean C., Pelvic floor muscle training for preventing and treating urinary and faecal incontinence in antenatal and postnatal women, Cochrane Database of	**Sample size** 46 studies N = not reported **Characteristics** Study characteristics • 8 were primary or secondary prevention trials (that is none of the women had incontinence symptoms at the start of training) • 9 were treatment trials (that is all women had incontinence symptoms at the start of training). • 29 were mixed prevention or treatment trials as some women did, and others did not, have incontinence	**Interventions** • Antenatal PFMT versus control (no PFMT, usual care or unspecified control) for treatment • Antenatal PFMT versus control for prevention or treatment • Postnatal PFMT versus control for treatment • Postnatal PFMT versus control for prevention or treatment Intervention characteristics:	**Details** The Mantel-Haenszel method with a fixed-effect model approach was used in the meta-analyses in this review, unless statistically significant heterogeneity (Chi² test, P < 0.10) in the comparison suggested a more conservative random-effect model was indicated	**Results** **Antenatal pelvic floor muscle training (PFMT) versus control for treatment of incontinence** <u>Incontinence-specific quality of life (ICIQ-SF, Scale from: 0 to 10 (higher worse))</u> PFMT versus usual care: 1 study, 41 participants, MD -3.5 (-6.13, -0.87) <u>Quality of life and health status measures - not meta-analysed</u> PFMT versus usual care: 1 study, IIQ • PFMT: Impact on social relations , on emotional health 11,	**Limitations** Limitations were assessed using the ROBIS tool to assess risk of bias in systematic reviews **Phase 1: Assessing Relevance** 1. Patients: antenatal (pregnant) or postnatal women (that is. women immediately following delivery or women with persistent urinary or faecal incontinence symptoms up to three months after their most recent delivery).

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Systematic Reviews, 2020, 2020 **Ref Id** 1284323 **Country/ies where the study was carried out** New Zealand **Study type** Systematic review **Aim of the study** To determine the effectiveness of pelvic floor muscle training (PFMT) in the prevention or treatment of urinary and faecal incontinence in pregnant or postnatal women. **Study dates** The date of the last search was August 2019	symptoms at the start of training Participants characteristics Age • 6 studies did not report age • Three trials reported an age range, with women aged between their early 20s to early 40s • In two trials, about 50% to 60% of the women were aged 20 to 29 years • In two trials, median age was about 28 years and in one trial the median age was 36 years • In the remaining 31 studies, the mean age was in the early 20s for 14 trials, and early 30's for 10 trials **Inclusion criteria** Types of studies • Randomised (including cluster and cross-over) controlled trials and quasi-randomised studies Types of participants	• 14 trials clearly provided exercise parameters that favoured strength training; short duration contractions of maximal or near maximal effort and a relatively small number of repetitions • 9 trials described PFMT programmes that were characteristic of strength training but did not mention loading (effort) • There was insufficient detail in the other 23 trials to classify them as providing strength or endurance training • 7 trials provided some information about PFMT but could not be categorised 16 trials did not specify any details of the PFMT received by intervention group		on recreational activities 10, and on physical activities 4, n=65 at 12 months postpartum • Control group: Impact on social relations 5, on emotional health 14, on recreational activities 10, and on physical activities 7, n=99 at 12 months postpartum **Antenatal pelvic floor muscle training (PFMT) versus control for (mixed) prevention or treatment of incontinence** <u>Incontinence-specific quality of life late pregnancy</u> PFMT versus usual care: 1 study, 224 participants, MD -0.20 (-1.21, 0.81) <u>Incontinence-specific quality of life early postnatal period (0-3 months)</u> PFMT versus usual care: 1 study, 211 participants, MD -0.60 (-1.45, 0.25) <u>Faecal incontinence-specific quality of life in early post-natal period (CRAIQ-7; 7 items; higher worse)</u>	Women could be with or without urinary, faecal, or both urinary and faecal incontinence symptoms at recruitment 2. Intervention: a PFMT programme to improve the function of the PFM, the external anal sphincter or both. All types of PFMT were considered, including variations in the purpose and timing of PFMT (for example PFMT for strengthening, PFMT for urgency suppression), ways of teaching PFMT, types of contractions (fast or sustained) and number of contractions. 3. Comparison: usual antenatal and postnatal care, placebo treatment or no treatment 4. Outcomes: Self-reported urinary or faecal incontinence, incontinence-specific quality of life, women's observations, quantification of symptoms, QoL, health economics, adverse effects, other outcomes (labour and delivery outcome, sexual

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding National Institute for Health Research, UK and the University of Otago, New Zealand	• Trials that recruited antenatal (pregnant) or postnatal women (immediately following delivery or women with persistent urinary or faecal incontinence symptoms up to three months after their most recent delivery) • Women could be with or without urinary, faecal, or both urinary and faecal incontinence symptoms at recruitment Types of intervention and control group • One arm of all eligible trials included a PFMT programme to improve the function of the PFM, the external anal sphincter or both • PFMT was a programme of repeated voluntary PFM contractions • All types of PFMT were considered, including variations in the purpose and timing of PFMT (for example PFMT for			PFMT versus usual care: 1 study, 74 participants, MD -2.60 (-7.84, 2.64) <u>Urinary incontinence-specific quality of life late postnatal period (>6-12 months) (ICIQ-SF, Scale from: 0 to 10 (higher worse))</u> PFMT versus usual care: 1 study, 190 participants, MD -0.20 (-1.20, 0.80) <u>Quality of life and health status measures - not meta-analysed</u> PFMT versus no PFMT 1 study, UDI-6 • PFMT: Mean 3.44, SD 3.26, n= 150 in late pregnancy, Mean 0.81, SD 1.36, n=150 at 0-3 months postpartum; Mean 0.35, SD 0.84, n=150 at > 3-6 months postpartum • Control group: Mean 4.66, SD 3.32, n=150 in late pregnancy; Mean 1.54, SD 1.59, n=150 at 0-3 months postpartum; Mean 0.86, SD 1.14, n=150 at > 3-6 months postpartum 1 study, IIQ7 • PFMT: Mean 3.77, SD 6.01, n=150 in late pregnancy; Mean 1.73, SD 3.57, n=150 at 0-3 months postpartum; Mean 0.77,	function, POP, non-specified outcomes judged to be important) **Phase 2: Identifying concerns with the review process** **Domain 1 Study eligibility criteria: Low** 1.1 Probably yes - the objectives are clearly stated, and PICO is provided, and a protocol is mentioned in the 'differences between protocol and review' section 1.2 Yes - eligibility criteria are appropriate and detailed 1.3 Yes - criteria is detailed and unambiguous. 1.4 Probably no - there are some restrictions on the intervention only with no justification 1.5 Yes - there were no restrictions in terms of language or publication status

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	strengthening, PFMT for urgency suppression), ways of teaching PFMT, types of contractions (fast or sustained) and number of contractions • Acceptable control interventions were usual antenatal and postnatal care, placebo treatment or no treatment • Studies in which the control group had or might have, received PFMT advice providing the PFMT arm was more intensive in some way than the control arm were included • Trials in which PFMT was combined with other physical therapy modalities such as biofeedback, electrical stimulation or multimodal exercise programmes were included Types of outcomes Primary outcomes • Self-reported urinary or faecal incontinence • Incontinence-specific quality of life			SD2.07, n=150 at > 3-6months postpartum • Control group: Mean 5.28, SD 5.16, n=150 in late pregnancy; Mean 5.28, SD 5.61, n=150 at 0-3 months postpartum; Mean 1.56, SD 2.20, n=150 at > 3-6 months postpartum PFMT versus usual care 1 study, Female Pelvic Floor Questionnaire (FPFQ) bladder score • PFMT: Mean 1.7, SD 1.3, n=112 in late pregnancy; Mean 0.8, SD 0.9, n=105 at 0-3 months postpartum; Mean 0.9, SD 1.1, n=94 at > 6-12 months postpartum • Control group Mean 2.0, SD 1.4, n=111 in late pregnancy; Mean 0.9, SD 1.0, n=107 at 0-3 months postpartum; Mean 1.0, SD 1.1, n=97 at > 6-12 months postpartum 1 study, Female Pelvic Floor Questionnaire (FPFQ) bowel score • PFMT: Mean 1.3, SD 1.1, n=112 in late pregnancy; Mean 1.2, SD 1.2, n=104 at 0-3 months postpartum; Mean 1.0, SD 1.0, n=94 at > 6-12 months postpartum	**Domain 2: Identification and selection of studies: Low** 2.1 Probably yes - the Cochrane Incontinence Specialised Register, was searched which contains trials identified from the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, MEDLINE InProcess, MEDLINE Epub Ahead of Print, CINAHL, ClinicalTrials.gov, World Health Organization International Clinical Trials Registry Platform (WHO ICTRP) and UK Clinical Research Network Portfolio 2.2 Yes - hand searching of journals and conference proceedings was carried out, as well as checking reference lists of relevant articles 2.3 Yes - full search strategy reported in appendices

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	Secondary outcomes • Women's observations for example severity of incontinence • Quantification of symptoms for example number of urinary or faecal incontinence episodes • Clinician's measures for example loss of urine under stress test • Other quality of life and health status measures • Health economics • Adverse effects for example discomfort or pain associated with PFMT • Other outcomes for example labour and delivery outcome (for example type of delivery, perineal trauma, episiotomy, length of second stage) for women who did antenatal PFMT; sexual function, pelvic organ prolapse, non-prespecified outcomes that were judged important when performing the review.			• Control group: Mean 1.4, SD 1.1, n=112 in late pregnancy; Mean 1.4, SD 1.2, n=107 at 0-3 months postpartum; Mean 1.1, SD 1.0, n=97 >6-12 months postpartum 1 study, Female Pelvic Floor Questionnaire (FPFQ) score • PFMT: Mean 0.7, SD 1.2, n=112 in late pregnancy; Mean 0.3, SD 1.1, n=104 at 0-3 months postpartum; Mean 0.4, SD 1.2, n=95 at > 6-12 months postpartum • Control group: Mean 0.7, SD 1.4, n=112 in late pregnancy; Mean 0.5, SD 1.3, n=107 at 0-3 months postpartum; Mean 0.4, SD 1.0, n=97 at > 6-12 months postpartum 1 study, Female Pelvic Floor Questionnaire sex score (0-10; 10 worse) • PFMT: Mean 2.7, SD 1.8, n=79 in late pregnancy; Mean 3.1, SD 2.1, n=73 at 0-3 months postpartum; Mean 2.4, SD 1.8, n=86 at > 6-12 months postpartum • Control group: Mean 3.1, SD 2.1, n=68 in late pregnancy; Mean 3.5, SD 2.2, n=77 at 0-3 months postpartum; Mean 2.7, SD	2.4 Yes - no restrictions on language or publication format 2.5 Probably yes - Two review authors assessed potentially eligible studies and resolved disagreements by discussion or a third author. Does not explicitly say that this was done independently, and doesn't explicitly talk about the title and abstract screening versus the full text screening **Domain 3: Data collection and study appraisal: Low** 3.1 Probably yes - Two review authors independently undertook data extraction, which was cross-checked by a third review author. Any disagreements were resolved by discussion 3.2 Yes - full included studies tables with all important characteristics at the end of the report

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	Exclusion criteria • Other forms of controlled clinical trials • Trials in which PFMT was combined with another stand-alone therapy such as bladder training or drug therapy (for example anticholinergic drug) were excluded • Trials of electrical stimulation (without PFMT) were excluded			2.0, n=83 at > 6-12 months postpartum 1 study, Contilife score (0-10; 10 better) • PFMT: Mean 9.3, SD 1.1, n=108 in late pregnancy; Mean 9.6, SD 0.8, n=102 at 0-3 months postpartum; Mean 9.5, SD 1.2, n=91 at > 6-12 months postpartum • Control group: Mean 9.2, SD 1.3, n=109 in late pregnancy; Mean 9.5, SD 0.8, n=101 at 0-3 months postpartum; Mean 9.5, SD 1.0, n=89 at > 6-12 months postpartum 1 study, Sexually active • PFMT: 83 of 112 at end of pregnancy; 74 of 104 at 0-3 months postpartum; 89 of 95 at > 6-12 months postpartum • Control group: 70 of 112 at end of pregnancy; 79 of 106 at 0-3 months postpartum; 91 of 97 at > 6-12 months postpartum 1 study, EuroQoL-5D (0-100; 100 better) • PFMT: Mean 76.4, SD 20.4, n=111 at end of pregnancy; Mean 82.8, SD 18.2, n=105 at 0-3 months postpartum; Mean 86.8, SD 13.1, n=94	3.3 Probably yes - The primary unit of analysis was per women randomised. Missing data not imputed as an ITT approach was used. No description of how data was handled if it wasn't reported in the correct way 3.4 Yes- quality assessed using Cochrane's risk of bias tool 3.5 Yes - Two review authors independently evaluated study quality. Any disagreements were resolved by discussion. **Domain 4: Synthesis and findings: Low** 4.1 Yes - number of studies in the PRISMA diagram matches number of studies that there are outcomes for 4.2 Probably yes - methods are rigourously described and a protocol is mentioned. The differences between protocol and review does not

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				at > 6-12 months postpartum • Control group: Mean 77.9, SD 16.3, n=112 at end of pregnancy; Mean 80.4, SD 17.0, n=107 at 0-3 months postpartum; Mean 82.9, SD 14.8, n=97 at > 6-12 months postpartum 1 study, BFLUTs questionnaire: a negative effect on exercise in response to question "does incontinence affect physical activity?" • PFMT: 47 of 585 at 6 months postpartum • Control group: 41 of 584 at 6 months postpartum • RR 1.14 (95%CI 0.76 to 1.71) 1 study, State Trait Anxiety Inventory (STAI) (20-80; 50-64 high; 65-80 very high) • PFMT: Trait anxiety 18 of 85; State anxiety 16 of 85 • Control group: Trait anxiety 20 of 76; State anxiety 14 of 76 • Trait anxiety, RR 0.80 (95% CI 0.46 to 1.40); State anxiety, RR 1.02 (95% CI 0.53 to 1.95) 1 study, sexual satisfaction at 6 years post delivery • PFMT: 34 of 94	suggest any differences in analyses 4.3 Probably yes - meta-analysis was appropriate for the RCT studies included. Where there was unexplained heterogeneity, a random effects model was used 4.4 Probably yes - heterogeneity was assessed in three ways: visual inspection of data plots, Chi2 test for heterogeneity and the I2 statistic. If there was heterogeneity, a random effects model was used. Subgroup analysis was also carried out according to the control comparison. 4.5 No information - no mention of no funnel plots. No mention of sensitivity analyses in regard to robustness 4.6 Probably no - risk of bias was assessed using a recommended tool. Sensitivity analysis with respect to trial quality was planned, however there were insufficient trials and

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• Control group: 17 of 94 • RR 2.00 (1.20 to 3.32) 1 study, Psychological General Well-being Index (PGWBI) (0-110; 110 better) • PFMT: Total score at end of pregnancy: Mean 79.5 (95% CI 78.5 to 80.6), n=389 • Control group: Total score at end of pregnancy: Mean 78.5 (95% CI 77.5 to 79.6), n=361 <u>Patient satisfaction - not meta-analysed</u> PFMT versus unspecified control 1 study, VAS patient satisfaction • PFMT: mean 7.6 • Control: no data **Postnatal pelvic floor muscle training (PFMT) versus control for treatment of incontinence** <u>Incontinence-specific quality of life</u> PFMT versus usual care: 1 study, 18 participants, MD -1.66 [-3.51, 0.19]	too many other potential causes of heterogeneity to make this useful **Phase 3: Judging risk of bias: Low** A. Yes - no concerns identified in phase 2 B. Yes - included studies are directly relevant to the question. There is a section of the discussion called overall completeness and applicability of evidence which considers relevance of the evidence C. Yes - results are discussed based on the primary analysis and includes both significant and non significant results - no particular results were over emphasised

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				<u>Severity of incontinence - not meta-analysed</u> PFMT versus usual care 1 study, Incontinence score (0-20, 20 worse), ICIQ-FLUTS • PFMT: Median 4.0, range 0 to 15, n=40 at 9 months postpartum • Control group: Median 4, range 0 to 12, n=42 at 9 months postpartum 1 study, Voiding score (0-20, 20 worse), ICIQ-FLUTS • PFMT: Median 1.0, range 0 to 5, n=40 at 9 months postpartum • Control group: Median 0.0, range 0 to 8, n=42 at 9 months postpartum 1 study, Urinary symptoms, BFLUTS • PFMT: Mean 40.56, SD 5.36, n=9 at between 8-14 weeks postpartum • Control group: Mean 46.89, SD 3.62, n=9 at between 8-14 weeks postpartum <u>Quality of life and health status measures - not meta-analysed</u> 1 study, Change in Urogenital Distress Inventory Score (maximum score 57)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT: A: Median change 4, IQR 1 to 10, n=23 after 9 weeks; B: Median change 7, IRQ range 3 to 8, n=20 after 9 weeks • Control: Median change 0, IQR range -2.3 to 6.5, n=19 after 9 weeks 1 study, Change in Incontinence Impact Questionnaire (maximum score 90) • PFMT: A: Median change 10, IQR range 2 to 16, n=23 after 9 weeks; B: Median change 13, IQR range 6 to 25, n=20 after 9 weeks • Control: Median change 0.5, IQR range -6.5 to 5.0, n=19 after 9 weeks of control condition 1 study, HADS anxiety score • PFMT: Mean 6.1, 95% CI 5.6 to 6.5, n=238 at 12 months • Control: Mean 6.8, 95% CI 6.3 to 7.3, n=219 at 12 months postpartum **Postnatal pelvic floor muscle training (PFMT) versus control for (mixed) prevention or treatment of incontinence**	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Severity of incontinence - not meta-analysed PFMT veresus usual care 1 study, Urinary condition score, not specified, 3 months • PFMT: Mean 2.2, SD0.2, n=106 • Control group: Mean 2.8, SD0.4, n=86 1 study, Urinary condition score, not specified, 3 months • PFMT: Mean 2.0, SD0.4, n=106 • Control group: Mean 2.5, SD 0.4, n=86 1 study, stress UI, Criteria from International Continence Society, 0-5 (lower score better; 6 months postpartum) • PFMT: Mean 2.84, SD 0.43, n=75 • Control: Mean 2.50, SD 0.41, n=73 1 study, stress UI, Criteria from International Continence Society, 0-5 (lower score better; 12 months postpartum) • PFMT: Mean 1.16, SD 0.38, n=75 • Control: Mean 2.20, SD 0.39, n=73	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				<u>Quality of life and health status measures - not meta-analysed</u> PFMT versus no PFMT 1 study, sexual function (reduced vaginal response at 10 months post partum) • PFMT: 5 of 51 • Control group: 13 of 56 PFMT versus usual care 1 study, Faecal Incontinence Specific Quality of Life (Rockwood Faecal Incontinence Quality of Life Scale (low better,no total score, 4 domain scores) • difference between groups: Lifestyle p =0.29, coping/behaviour p=0.27, depression/self perception p=089, embarrassment p=0.51 1 study, general wellbeing (5 point Likhert scale) • PFMT: 11 feeling not very well or not at all well, n=816 at 3 months postpartum • Control: 18 feeling not very well or not at all well, n=793 at 3 months postpartum 1 study, sexual function (attempted sexual intercourse within 3 months of delivery)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT: 714 of 819 • Control: 681 of 792 1 study, sexual function (Dyspareunia at 3 months postpartum) • PFMT: 167 of 819 • Control: 154 of 792 <u>Pelvic organ prolapse symptoms - not meta-analysed</u> 1 study, ICIQ-Vag, bulging inside vagina (yes, no) • PFMT: 8 of 87 at 6 months postpartum • Control: 22 of 88 at 6 months postpartum • Mean difference 0.37 (95% CI 0.17 to 0.78) 1 study, ICIQ-Vag, bulging outside vagina (yes, no) • PFMT: 5 of 87 at 6 months postpartum • Control: 6 of 88 at 6 months postpartum • Mean difference 0.84 (95% CI 0.27 to 2.66) 1 study, POP-Q, stage 1 or 2 • PFMT: 61 of 87 at 6 months postpartum Control: 64 of 88 at 6 months postpartum • Mean difference 0.88 (95% CI 0.46 to 1.70)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments

CRADI: Colorectal-Anal Distress Inventory; CRAIQ: Colo-Rectal-Anal Impact Questionnaire; EQ5D: EuroQOL quality of life scale ; FIQL: faecal incontinence related quality of life scale; ICIQ-UI SF: International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form; ICIQ: International Consultation on Incontinence Questionnaire-Urinary Incontinence; ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire Lower Urinary Tract Symptoms Quality of Life Module; IIQ-7: Incontinence Impact Questionnaire; I-QOL: incontinence related quality of life; ISI: incontinence severity score; KHQ: Kings Health Questionnaire; OABSS: Overactive Bladder Symptom Score; PFDI: pelvic floor distress inventory; PFIQ-7: Pelvic Floor Impact Questionnaire; PFM: pelvic floor muscle; PFMT: pelvic floor muscle training; PGI-I: Patient Global Impression of Improvement; PISQ: Prolapse and Incontinence Sexual function Questionnaire; POP: pelvic organ prolapse; POPDI: Pelvic Organ Prolapse Distress Inventory; PTNS: percutaneous posterior tibial nerve stimulation; QUID: Questionnaire for Urinary Incontinence Diagnosis; SUI: stress urinary incontinence; TTNS: transcutaneous tibial nerve stimulation; UDI-6: Urinary Distress Inventory; UI: urinary incontinence

Table 6: Evidence tables for additional randomised trials

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Al Belushi, Z. I., Al Kiyumi, M. H., Al-Mazrui, A. A., Jaju, S., Alrawahi, A. H., Al Mahrezi, A. M., Effects of home-based pelvic floor muscle training on decreasing symptoms of stress urinary incontinence and improving the quality of life of urban adult Omani women: A randomized controlled single-blind study, Neurourology & UrodynamicsNeurourol Urodyn, 39, 1557-1566, 2020	**Sample size** N=73 **Characteristics** Age (mean, SD), years: Intervention group 35.69 ± 7.08; control group 34.30 ± 7.60 BMI (mean, SD): Intervention group 30.11 ± 6.99; control group 27.96 ± 4.95 ICIQ sum score (mean, SD): Intervention group 8.11 ± 4.05; control group 8.00 ± 4.24	**Interventions** **PFMT (n=36)**: Participants were educated individually using audio-visual aids about the anatomy of PFM's, continence mechanisms, and the importance of PFMT in the management of UI problems. They were also trained about the daily schedule of performing the PFMT which involved endurance and speed training. The endurance training (tonic contractions) of the PFM's consists of slow velocity close to maximum contractions for 3 to 10 seconds (according to the initial pelvic floor assessment) followed by relaxation for the same duration. For example, if the initial pelvic floor	**Details** A validated Arabic version of the ICIQ-SF. Subjects were asked to fill this questionnaire at baseline and again at 12 weeks. ICIQ-SF consists of four main items: frequency of UI, amount of leakage, the overall impact of UI, and a self-diagnostic item. It is scored from 0 to 21 with higher scores indicating worsening severity. ICIQ sum score (at baseline and postintervention) was categorized initially to mild UI (score, 1-5),	**Results** **Improvement in the ICIQ sum score (n, %)** PFMT group: 17/36 (47.2%) Control group: 2/37 (5.4%)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, a computer generated random number table was used 1.2 Probably yes, states that an independent investigator prepared 74 envelopes with assignments 1.3 No, there were no significant differences between groups in baseline values Low risk 2.1 Yes, participants were aware of their assignment due to the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Ref Id 1290361 **Country/ies where the study was carried out** Oman **Study type** RCT **Aim of the study** To determine the effectiveness of home-based pelvic floor muscle training (PFMT) on decreasing the severity of symptoms and improving the quality of life (QOL) among Omani women with stress urinary incontinence (SUI) **Study dates** 5 August to 7 November 2018 **Source of funding**	**Inclusion criteria** Omani women who were diagnosed with SUI only (from a concurrent phase-I study which was a cross-sectional study to determine the prevalence of UI in Oman), aged between 20 and 50 years, nonpregnant, able to read and write, and were attending the selected three PHCs for any reason **Exclusion criteria** Women in the postnatal period (delivery within the past 6 months), immobility, those attending emergency services, and those with pelvic organ prolapse grades III and IV during the initial assessment by an experienced woman health's physiotherapist (according to the classification of International Continence Society).	assessment shows a time of sustained contraction of 5 seconds, the subject was instructed to have slow contractions for 5 seconds for the first week, and then to increase it to 6 seconds in the next week and so on with the aim of reaching 10 seconds. Thus, the sustained period of contraction was increased by 1 second per week to a maximum of 10 seconds. Speed training (phasic contractions) involved fast contractions of moderate strength for 2 seconds followed by relaxation for 2 seconds. The aim was to have five home sessions of both slow and fast contractions per day at supine, sitting, and standing positions. Each session consisted of 10 slow and 10 fast contractions. Correct PFM contractions were confirmed by vaginal examination during the assessment period by a trained physiotherapist. The participants were well instructed to contract PFM's only and avoid flexing the abdominal or thigh muscles.	moderate (score, 6-12), and severe (score, ≥13). Then, the change in the ICIQ was categorized into four levels of improvement (worsening, no improvement, 1-severity point improvement [including improvement from severe to moderate and moderate to mild], and 2-severity point improvement). As the numbers in some categories related to the improvement levels of various outcomes were small, the “worsening” level was merged with the “no improvement” one, and the “1-point” and “2-point improvement” levels were also merged. The improvement in various outcomes was assessed by calculating the difference from the baseline in each		nature of the intervention 2.2. Yes, those delivering the intervention were aware of the participants' assignment due to the nature of the intervention 2.3 No information, does not state if there were any deviations from the protocol 2.6 Yes, intent to treat analysis was used Some concerns 3.1 Yes, nearly all participants had data Low risk 4.1 No, the outcome was measured using a validated questionnaire 4.2 No, the questionnaire could not have differed between groups 4.3 Yes, as the questionnaire was self report 4.4 Probably no, as the control group received an active control intervention Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
This study was supported by Sultan Qaboos University (Deanship of Research Fund).		**Control group (n=37)**: The participants in the control group were invited to a single lecture which they attended as a group (the number of participants in the group could vary between 2 and 5 subjects) on the earliest possible day at the same centre of their enrolment. They were given a 15-minute lecture using audio-visual aids on the anatomy of PFM's, continence mechanisms, and the importance of doing PFMT to alleviate problems related to UI. The scientific content of the group lecture was similar to the individualized lecture given to each participant in the intervention group before training. The participants in the control group were not trained or given weekly reminders over the telephone. At the end of the study, all women in the control group received instructions on PFMT by the PI, and those with a score of zero in the modified Oxford grading system (MOGS) were referred to a specialized physiotherapy centre for further management. A follow-up	group, adjusting for the baseline level.		5.1 No, there is no published protocol to assess pre-specified intentions 5.2 No information, analysis intentions are not available 5.3 No information, analysis intentions are not available Some concerns Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		appointment at 12 weeks was offered upon request to women in the control group			
Full citation Araujo, C. C., Marques, A. A., Juliato, C. R. T., The Adherence of Home Pelvic Floor Muscles Training Using a Mobile Device Application for Women With Urinary Incontinence: A Randomized Controlled Trial, Female Pelvic Medicine & Reconstructive SurgeryFemale pelvic med, 26, 697-703, 2020 **Ref Id** 1290295 **Country/ies where the study was carried out** Brazil **Study type** RCT	**Sample size** N=33 **Characteristics** Age, mean (SD): App group 47.2 (10.6); control group 53.3 (13.2) years Race, n (%): Caucasian - app group 13 (81.2), control group 14 (87.5); Other - app group 3 (18.7), control group 2 (12.5) BMI, mean (SD): App group 27.9 (4.2); control group 28.5 (5.5) QUID, mean (SD): • Total score: App group 14.3 (8.3); control group 15.6 (7.4) • SUI: App group 9.3 (4.6); control group 8.7 (4.6)	**Interventions** **App based PFMT** n=17**:** To guide home exercise, women received the mobile app Diário Saúde, which was specially developed. The app was based on the visual component of sEMG as a guide for PFMT, without a vaginal probe but with better screen resolution and an alarm that reminds the used perform the exercises twice a day. At home, the women were asked to repeat the exercises by following a dynamic sequence of images on the app screen these images presented a correlation with the exercise that was being requested. For example, an 8-second contraction would be represented by a larger graphic area, different from phasic short contractions (smaller spikes), comprising 152 seconds of animation. Music was synchronized with the contractions during the exercise and the volume changes when the exercises begin or finish. Furthermore,	**Details** Adherence was considered the primary endpoint and was evaluated by a researcher, who accessed the number of protocol repetitions (hold/relaxation/phasic contraction). One repetition is definedas completion of all the sequence (8 times hold/relaxation/phasic contraction). An incomplete protocol was not considered a repetition. Women were asked to attribute a score, from 0 to 10, regarding their commitment to exercises where 0 means “no exercise at all” and 10 means “maximal adherence” (self-reported adherence).	**Results** **Self reported adherence - Score attribute by women from 0 to 10, regarding their commitment to exercises (mean, SD)** 1 month • App group: 9.5 ± 0.7 • Control group: 8.3 ± 1.5 2 months • App group: 9.9 ± 0.2 • Control group: 9 ± 1.3 3 months • App group: 9.9 ± 0.2 • Control group: 8.67 ± 1.3 **QUID total score, mean (SD)** 1 month • App group: 10.4 ± 9.4 • Control group: 9.2 ± 6.9 2 months • App group: 8.7 ± 9.25 • Control group: 4.5 ± 7.1 3 months	**Limitations** Cochrane risk of bias tool (v2) 1.1 Yes, said to be computer generated 1.2 Probably yes, states that sequence was kept in sealed opaque envelopes 1.3 No, no significant differences between groups at baseline Low risk 2.1 Yes, participants were aware of their group assignment 2.2 Yes, carers and people delivering the interventions were aware of participants assignment 2.3 Probably no, there was some non-adherence, but this is not likely due to the trial context 2.6 Probably no, per protocol analysis was used which excluded participants who were lost to follow up

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To evaluate the impact of the Diário Saúde app on patient adherence to home PFMT exercises at 3 months in women undergoing conservative treatment for SUI **Study dates** October 2016 to June 2017 **Source of funding** Postgraduate scholarship from Coordenação de Aperfeiçoamento de Pessoal de Nível Superior	• OAB: App group 5 (4.7); control group 6.9 (5.0) ICIQ-UI SF score, mean (SD): App group 16.3 (4.0); control group 15.9 (4.7) ICIQ-VS score, mean (SD): • Vaginal symptoms: App group 11.8 (8.8); control group 13.7 (8.4) • Sexual function: App group 12.0 (20.4); control group 8.6 (16.2) • Quality of life: App group 5.0 (4.6); control group 5.9 (4.1) **Inclusion criteria** Women with self-reported SUI symptoms were included. The SUI diagnosis was based on a demonstration of urinary leakage on straining or coughing. In those who presented with mixed urinary incontinence,	when the woman finishes the exercise, she reports her perception of improvement on that day. Information would be saved in the app and is available for be remote accessed by the researcher. To observe adherence in the app group, the researcher accessed the app to determine how often the protocol program was activated. **Written PFMT** n=16**:** The women in this group received printed instructions for home PFMT. The static image of muscular contraction presented in the paper was similar to that obtained through a sEMG screen. The women filled in a diary paper offering information about adherence during home exercise. Both groups had the same exercise protocol. Each completed protocol comprises 8-second hold/8-second relaxation followed by 3 phasic contractions, repeated 8 times, with a total of 32 contractions and 152 seconds. The physiotherapist recommended that the	The secondary end points were changes in vaginal symptoms, quality of life, urinary and stress urinary symptoms obtained through questionnaires scores, PFM examination (power, endurance, number of repetitions and fast contractions), and cure rates.	• App group: 7.5 ± 9.0 • Control group: 3.9 ± 3.6 **ICIQ-UI SF score, mean (SD)** 1 month • App group: 12.9 ± 4.6 • Control group: 12.4 ± 6.7 2 months • App group: 10.9 ± 6.9 • Control group: 11.3 ± 5.0 3 months • App group: 9.1 ± 6.6 • Control group: 9.7 ± 6.6 **ICIQ-VS score, mean (SD)** **Vaginal symptoms** 1 month • App group: 9.7 ± 8.5 • Control group: 10.9 ± 8.1 2 months • App group: 6.2 ± 7.9 • Control group: 7.0 ± 3.9 3 months • App group: 6.8 ± 8.2 • Control group: 6.0 ± 4.9	2.7 Probably yes, although there were no participants missing at 1 month follow up, but 20% missing at 2 months, and 36% at 3 months High risk 3.1 No, although no participants missing at 1 month follow up, over 5% missing at both 2 and 3 months 3.2 No, no evidence that the results were not biased by missing data 3.3. Probably yes, although reasons for drop out are documented, some are vague for example 'not available' and some are related to the outcome for example 'reported no symptoms'. 3.4 Probably yes, differences between the groups in terms of the proportion of missing data (29% vs 44%) High risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	the predominant type was SUI, based on the self-reported symptoms, using Questionnaire for Urinary Incontinence Diagnosis (QUID) **Exclusion criteria** The exclusion criteria were neurologic impairment that affects comprehension, symptoms suggestive of neurogenic bladder (a dribbling stream when urinating, inability to fully empty the bladder, straining during urination, loss of bladder control, and difficulty determining when the bladder is full), alterations in PFM contraction (hyperactivity or complete inability to contract) after initial vaginal palpation, previous PFMT, pelvic organ prolapse (greater than stage I by Pelvic Organ Prolapse Quantification), urinary infections	patient did the completed protocol 2 times a day (sitting, lying down, or standing) for 3 months. The app group was instructed to do the exercises when the app sends a visual alarm. The control group was instructed to do the exercise twice at any time of the day.		**Sexual function** 1 month • App group: 11.4 ± 14.2 • Control group: 12.9 ± 23.2 2 months • App group: 6.4 ± 19.3 • Control group: 17.8 ± 18.7 3 months • App group: 8.2 ± 20.3 • Control group: 2.7 ± 5.5 **Quality of life** 1 month • App group: 4.4 ± 4.3 • Control group: 3.9 ± 4.2 2 months • App group: 1.8 ± 3.2 • Control group: 3.1 ± 3.7 3 months • App group: 5.6 ± 4.3 • Control group: 1.3 ± 2.9 **Adherence - number of protocol repetition (mean, SD)** 1 month • App group: 52.9 ± 5.5 • Control group: 43.7 ± 11.1	4.1 No, validated questionnaires were used 4.2 No, measurement is unlikely to differ between groups 4.3 Yes, outcome assessors were aware as self report measures were used 4.4 Probably not, as both groups received an active intervention Low risk 5.1 Probably no, there is a published protocol, however the this does not include intentions for analysis 5.2 No, the protocol does include outcome measures which are reported in the paper 5.3 No information, an analysis plan is not reported Some concerns Overall judgement: High risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	symptoms, and previous pelvic floor surgeries.			2 months • App group: 49.8 ± 8.1 • Control group: 33.6 ± 10.7 3 months • App group: 43.8 ± 8.7 • Control group: 17.7 ± 6.3	
Full citation Dumoulin, C., Morin, M., Danieli, C., Cacciari, L., Mayrand, M. H., Tousignant, M., Abrahamowicz, M., Urinary, Incontinence, Aging Study, Group, Group-Based vs Individual Pelvic Floor Muscle Training to Treat Urinary Incontinence in Older Women: A Randomized Clinical Trial, JAMA Internal Medicine, 180, 1284-1293, 2020 **Ref Id** 1290393	**Sample size** N=362 **Characteristics** Age, mean (SD), year: Individual PFMT 67.9 (5.9); group PFMT 68.0 (5.7) BMI, mean (SD) Individual PFMT 27.2 (4.6); group PFMT 27.0 (4.5) Type of incontinence (no, %): • Stress: Individual 27 (15); Group 35 (20) • Mixed: Individual 157 (85); Group 143 (80)	**Interventions** women in both treatment arms received a 12-week PFMT program under the direction of an experienced pelvic floor physiotherapist, either in individual or group sessions. For both interventions, each weekly session lasted 1 hour and included a 15-minute educational period and a 45-minute exercise component. The exercise targeted PFM strength, power, endurance, coordination, and integration into daily living activities, such as coughing. The 12-week training protocol comprised three 4-week phases with the gradual addition of increasingly difficult exercises in terms of	**Details** Both per protocol and ITT were used at 1 year, per protocol was used at 12 weeks.	**Results** **Perceived benefit on PGI-I, number (%)** 12 weeks • Individual (n=171): 164 (96) • Group (n=166): 160 (96) 1 year • Individual (n=163): 138 (85) • Group (n=153): 132 (86) 1 year (ITT) • Individual (n=171): 146 (85) • Group (n=166): 144 (87) **Satisfaction, number (%)** 12 weeks	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, computer generated randomisation was used 1.2 Probably yes, states that assignments were sealed 1.3 No, no statistically significant differences between the groups Low risk 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Canada **Study type** RCT **Aim of the study** To assess the efficacy of group-based PFMT relative to individual PFMT for urinary incontinence in older women. **Study dates** July 1, 2012, to June 2, 2018. **Source of funding** Not reported	Duration of symptoms, mean (SD), years: Individual 10.3 (10.6); Group 9.2 (9) **Inclusion criteria** Eligible participants were women aged 60 years or older with symptoms of stress or mixed urinary incontinence who reported at least 3 episodes of involuntary urine loss per week during the preceding 3 months. Stress and mixed urinary incontinence were confirmed using the validated Questionnaire for Incontinence Diagnosis **Exclusion criteria** Exclusion criteria were body mass index (BMI) 35 or greater (calculated as weight in kilograms divided by height in meters squared), reduced mobility (requiring a	duration, number of repetitions, and position. Women in both study arms were expected to perform PFM exercises at home, 5 days per week during the 12-week physiotherapy program, and subsequently 3 days per week for 9 months. **Individual PFMT (n=184):** participants in the individual PFMT arm used intravaginal electromyographic biofeedback during each treatment session for 10 to 15 minutes **Group PFMT (n=178):** In addition to the standard protocol, participants in the group-based PFMT arm who reported having difficulty with the PFM exercises were offered short private sessions with the physiotherapist to ensure understanding and correct performance of a PFM contraction		• Individual (n=171): 160 (94) • Group (n=165): 150 (91) 1 year • Individual (n=164): 148 (90) • Group (n=153): 148 (91) 1 year (ITT) • Individual (n=171): 154 (90) • Group (n=165): 150 (91)	2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol 2.6 Probably not, states that an ITT analysis was used, but there are participants missing from the ITT analysis 2.7 Probably yes, 43/362 participants not included in follow up High risk 3.1 No, over 5% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, reasons for missing data are given and are mostly not related to the intervention/outcomes (1 in the individual

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	mobility aid), chronic constipation,16 important pelvic organ prolapse (Pelvic Organ Prolapse Quantification System >stage 2), physiotherapy treatment or surgery for urinary incontinence or pelvic organ prolapse in the past year, use of medications for urinary incontinence or affecting skeletal muscles, change in hormonal replacement therapy in the past 6months, any leakage of stool or mucus, active urinary or vaginal infection in the past 3 months, or any comorbidities or risk factors interfering with the study				group disliked the treatment) Low risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably no, as both groups received an active intervention Low risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 No information, an analysis plan is not published 5.3 No information, an analysis plan is not published Some concerns Overall rating: High risk of bias

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Figueiredo, V. B., Nascimento, S. L., Martinez, R. F. L., Lima, C. T. S., Ferreira, C. H. J., Driusso, P., Effects of individual pelvic floor muscle training vs individual training progressing to group training vs group training alone in women with stress urinary incontinence: A randomized clinical trial, Neurourology and Urodynamics, 2020 **Ref Id** 1272946 **Country/ies where the study was carried out** Brazil **Study type** RCT **Aim of the study** To assess the effects of individual pelvic	**Sample size** N=90 (30 women withdrew from PFMT before completing all sessions and were replaced with new participants) **Characteristics** Mean age (SD), years: 53 (12.5) (IT: 50.3 ± 11.9; GT: 57.8 ± 9.5; and IPGT: 50.8 ± 14.4) Type of UI: • SUI 44.4% (Individual 10 (33.3%); group 10 (33.3%); individual then group 20 (66.7)) • MUI 55.6% (Individual 20 (66.7%); group 20 (66.7%); individual then group 10 (33.3%)) BMI • Healthy: Individual 9 (30%); group 6 (20%); individual then group 11 (36.7%)	**Interventions** Initially, all participants received standardized guidance about the anatomy and function of the PFM and how to perform a properly contraction. The women participated in 12 sessions lasting 30 minutes each, once a week, with direct supervision by a physical therapist. The physiotherapists at both centers received the same training. For all groups, the same PFMT protocol developed for this study was used, with progression parameters based on the principles of exercise physiology. Both sustained and fast PFM contractions were performed with progression parameters of the sustained contractions (number of series, repetitions, sustain, and resting time) and fast contraction (number of repetitions). The training was performed with participants lying down, sitting, and standing. Each participant was instructed to perform the same exercise protocol as they performed with the physical therapist, at home,	**Details** Participants were assessed before the PFMT intervention (pretreatment) and reassessed just after 12 weeks of intervention (posttreatment), 3 and 6 months after the end of the intervention. The primary outcome was UI severity, assessed using the KHQ. Its score ranges from 0 to 100 and increases with greater severity. A clinically significant change in this questionnaire is five points. Adherence to PFMT was assessed using an exercise diary designed to monitor how many days of the week they did PFMT (including days of unsupervised training). However, there was poor adherence to keeping the diary (31/90 did not return the exercise diary at	**Results** **Severity of UI (assessed with the KHQ)** Pre-treatment • Individual PFMT (n=30): 34.8 ± 19.2 • Group PFMT (n=30): 33.5 ± 23.2 • Mixed PFMT (n=30): 38.6 ± 25.5 Post-treatment • Individual PFMT: 24.9 ± 19.9 • Group PFMT: 23.5 ± 20.1 • Mixed PFMT: 22.7 ± 23.4 3 months follow up • Individual PFMT (n=30): 18.7 ± 20.7 • Group PFMT (n=30): 22.7 ± 18.7 • Mixed PFMT (n=30): 20.4 ± 23.3 6 months follow up	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, a random number generator website was used 1.2 Probably yes, mentions that randomisation was carried out by an independent investigator who was not involved in study recruitment or the intervention 1.3 Yes, there were differences in the number of overweight participants in the three groups (I-PFMT 40%; G-PFMT 30%; IG-PFMT 10%), the number of women with <9 year education (60%; 43.3%; 33.3%), the number of women with 4-8 pregnancies (13.3%; 36.7%; 3.3%), the number of postmenopausal women (43.3%; 80%; 56.7%), and the type of UI. Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
floor muscle (PFM) training vs individual training (IT) progressing to group training (GT) vs group-only training in women with stress urinary incontinence. **Study dates** Not reported **Source of funding** Foundation for Support in Scientific and Technological Development of Ceará	• Overweight: Individual 12 (40%); group 9 (30%); individual then group 3 (10%) • Obese: 9 (30%); 15 (50%); 16 (53.3%) Prolapse • Individual 7 (23.3%); 10 (30%); 5 (16.7%) **Inclusion criteria** The study included women over 18 years of age who had not undergone physical therapy treatment for PFM dysfunction in the last year and with a clinical complaint of urinary loss due to exertion, which was investigated using two modified questions of the King's Health Questionnaire (KHQ). **Exclusion criteria** The exclusion criteria were: diagnosis of urgency incontinence, neuromuscular disease, other diseases (asthma,	every day, over the 12 weeks of supervised training, and to continue to train after the 12 supervised intervention sessions. **Individual PFMT (n=30):** participants received all 12 sessions individually **Group PFMT (n=30):** participants received all 12 sessions in a group **Individual progressing to group PFMT (n=30):** participants received the first four training sessions individually and then progressed to eight group training sessions	assessment 3, and 28/90 did not return the diary at assessment 4).	• Individual PFMT (n=30): 16.2 ± 20.2 • Group PFMT (n=30): 23.8 ± 19.2 • Mixed PFMT (n=30): 24.2 ± 24.4	2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, apart from the 30 participants who dropped out and were subsequently replaced, deviations from the protocol are not described. Adherence couldn't be assessed due to the number of women not returning their exercise diaries 2.6 Probably not, the authors excluded and replaced participants who did not complete all sessions, so an intent to treat analysis was not carried out 2.7 Probably yes, 30 participants were excluded from analysis and replaced High risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	tumours, and heart failure), absence of PFM contraction (grade 0) verified by the modified Oxford scale, urinary tract infection, difficulty in understanding study procedures, presence of severe prolapse (visible prolapse in the vaginal opening), uncontrolled hypertension, and pregnancy				3.1 Probably no, excluded 30 participants who did not complete all PFMT sessions 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 No information, as all groups received PFMT, and no information on which groups the participants who had dropped out actually belonged to 3.4 No information High risk 4.1 No, the KHQ is a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably no, as all groups received the same active intervention Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					5.1 Yes, a protocol was published for this study 5.2 No, outcome was assessed using only one measure, which is fully reported 5.3 No, no evidence of multiple analyses Low risk Overall rating: High risk of bias
Full citation Fitz, F. F., Gimenez, M. M., de Azevedo Ferreira, L., Matias, M. M. P., Bortolini, M. A. T., Castro, R. A., Pelvic floor muscle training for female stress urinary incontinence: a randomised control trial comparing home and outpatient training, International Urogynecology Journal, 31, 989-998, 2020 **Ref Id** 1290438	**Sample size** N=69 **Characteristics** Age (mean, SD), years: Combination group 57.5 (11.9); home PFMT group 56 (10.3) BMI (mean, SD), kg/m2: Combination group 31.0 (7.3); home PFMT group 33.3 (5.9) I-QoL-ALB (mean, SD): Combination group 108.8 (37.7); home PFMT group 109.0 (40.9) I-QoL-PS (mean, SD): Combination group 149.5 (40.5); home	**Interventions** **Outpatient PFMT n=34:** During the 3 months, the patients performed 24 outpatient sessions of PFMT under the guidance of a physiotherapist (twice a week) and additional home PFM exercises. The outpatient PFMT group performed exercises in supine (first month), sitting (second month) and standing (third month) positions. Under the physical therapist's supervision and encouragement, the participant conducted one set of PFM exercises. **Home PFMT n=35 :** During the 3 months, the patients performed PFMT at	**Details** Quality of life was assessed using the Incontinence Quality-of-Life Questionnaire (I-QoL). The I-QoL questionnaire is composed of 22 questions evaluating the limitations on human behaviour, the psychosocial impact, and the social embarrassment associated with urinary incontinence. The responses are scored between 1 and 5 points, and those are summed and converted into a percentage. A better quality of life is	**Results** **I-QoL - Avoidance and limiting behaviour (at 3 months)** • Outpatient (n=28): 140.3 (24.9) • Home (n=28): 139.2 (37.2) **I-QoL - Psychosocial impacts (at 3 months)** • Outpatient (n=28): 171 .6 (33.7) • Home (n=28): 179.4 (37.6) **I-QoL - Social embarrassment (at 3 months)** • Outpatient (n=28): 59. 8 (22.9) • Home (n=28): 69.8 (30.7)	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, computer generated random number table was used 1.2 Probably yes, states that the allocation sequence was concealed in sealed and opaque envelopes 1.3 Probably yes, there is a difference in the I-QoL SE at baseline, although according to the paper this is not statistically significant Some concerns 2.1 Yes, participants were aware which

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Brazil **Study type** RCT **Aim of the study** To compare the efficacy of performing PFMT in an outpatient clinic and at home in Brazilian incontinent women, and to verify if home PFMT may be an alternative to those not able to attend the outpatient sessions. **Study dates** Not reported **Source of funding** Not reported	PFMT group 140.5 (44.5) I-QoL-SE (mean, SD): Combination group 42.2 (32.2); home PFMT group 56.0 (40.1) **Inclusion criteria** Patients presenting with SUI and/or mixed urinary incontinence with predominant SUI symptoms and ≥ 2 g of leakage measured by pad test and who had the capability of contracting the PFM properly **Exclusion criteria** Younger than 18 years of age, had chronic degenerative diseases, pelvic organ prolapse greater than stage I by the POP-Q, neurological or psychiatric diseases, the inability to contract the PFM, or had participated in previous pelvic floor re-education programs, and/or had undergone previous pelvic floor surgeries	home with three outpatient sessions of PFMT under the guidance of a physiotherapist. In the home PFMT group, the patients returned to the clinic once a month to receive a new routine and diary of PFMT exercises to perform at home. During the PFMT, the physiotherapist investigator instructed the patients by verbal command to maintain the PFM contraction, and the participants were encouraged to conduct one set of the PFM exercises under supervision. The PFMT protocol was described in accordance with the Consensus on Exercise Reporting Template. This includes items such as type of exercise, dosage, intensity, frequency, supervision, progression and individualisation, which are necessary for specific interventions of the exercise. It is recommended that, as a minimum, the seven-domain CERT should be used to guide the reporting of exercise	associated with a higher percentage. The number of completed exercise sets was obtained using an exercise diary and it was recorded as the mean of the exercise sets per month performed during the 3-month therapy for both groups. The protocol includes the performance of three sets per day/7 days a week. The patients who performed the exercises less than 3 days a week/3 sets a day were excluded. The patients had to perform at least 36 sets of exercises per month to be considered in the analyses. In a 30-day month we expected the performance of a total of 82 sets of exercises per month as 100% adherence in the outpatient PFMT group (excluding the eight	**Patient satisfaction (ITT analysis)** • Outpatient: 24/34 (70.6%) • Home: 18/35 (51.4%) **Adherence** 1st month • Outpatient: 76.4 (8.8) • Home: 64.8 (18.5) 2nd month • Outpatient: 74.6 (11.1) • Home: 62.5 (22.4) 3rd month • Outpatient: 75.6 (9.4) • Home: 68.7 (19.8)	group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol, apart from adherence, although this is unlikely due to the trial context 2.6 Probably no, an intent to treat analysis was used for one outcome, and per protocol analysis was used for the rest, excluding participants who dropped out 2.7 Probably yes, more than 5% of participants not included in follow up High risk 3.1 No, over 5% missing from each group

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		programs and be accompanied by supplementary online material, such as diagrams or photograph. Both groups were encouraged to perform three sets of ten repetitions daily during the 3 months. One set consisted of 10 maximum voluntary contractions held for 6–10 s (6 s during the 1st month, 8 s during the 2nd month, 10 s during the 3rd month) with double-time rest between each contraction, followed by three to five fast contractions in a row (three contractions during the 1st month, four contractions during the 2nd month, five contractions during the 3rd month). The exercises were performed in supine (1st month), sitting (2nd month), and standing (3rd month) positions. The patients in both groups were evaluated for progression of the training on a monthly basis and received the exercise diary	sets per month performed during the outpatient sessions). In the home PFMT group, 100% adherence was achieved when a total of 89 sets of exercises per month were performed (excluding one set performed per month during the outpatient session). The frequency of the outpatient sessions was monitored by the physiotherapist and it was expressed as the percentage of the total sessions after 3 months of supervised treatment. We considered 100% adherence when the patients attended 24 sessions in the outpatient PFMT group and three sessions in the home PFMT groups. All patients were instructed to report absences from the outpatient sessions, after which		3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, states reasons for drop out which are not related to the treatment/outcomes Low risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably no, as all groups received an active intervention Low risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 No information, an analysis plan is not published

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
			a new date was scheduled. The satisfaction and willingness to have another treatment was measured by a simple question asking the patients if they were “satisfied” with regard to their condition (urinary incontinence) and the treatment, or “dissatisfied” if the patient desired a different treatment other than the initial one. ITT analysis was performed for patient satisfaction only		5.3 No information, an analysis plan is not published Some concerns Overall rating: High risk of bias
Full citation Gungor Ugurlucan, F., Onal, M., Aslan, E., Ayyildiz Erkan, H., Kizilkaya Beji, N., Yalcin, O., Comparison of the effects of electrical stimulation and posterior tibial nerve stimulation in the treatment of	**Sample size** N=59 **Characteristics** Mean age (SD): ES group 53.78 (10.5); PTNS group 51.18 (11.1) Mean BMI (SD): ES group 31.2 (5.8);	**Interventions** **Electrical stimulation (n=38):** Endomed-M 433 (Delf Instruments Physical Medicine B.V.) electrical stimulator and stimulating electrodes were used. The electrode was inserted into the vagina. The vaginal plug was cylinder-shaped with ringed-shaped electrodes. Pulses of 10–50 Hz square waves at a 300- μs or 1-ms	**Details** Health related quality of life was assessed using the validated Turkish version of the King's Health Questionnaire	**Results** **King's Health Questionnaire - total score (0-900?; high is poor outcome)** Baseline: ES (n=35): 469.78 (222.4) PTNS (n=17): 467.98 (189.1) After treatment: ES (n=35): 328.18 (195.1)	**Limitations** Cochrane risk of bias (Version 2.0) Domain 1: Randomisation: Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
overactive bladder syndrome, Gynecologic & Obstetric InvestigationGynecol Obstet Invest, 75, 46-52, 2013 **Ref Id** 1196618 **Country/ies where the study was carried out** Turkey **Study type** RCT **Aim of the study** To evaluate the efficacy of PTNS compared with ES among women with OAB **Study dates** Not reported **Source of funding** This study was supported by the	PTNS group 32.7 (6.8) Number with urge incontinence: ES group 33 (94.3%); PTNS group 17 (100%) **Inclusion criteria** Inclusion criteria were having the symptoms of OAB and urodynamic observation of detrusor overactivity **Exclusion criteria** Exclusion criteria were pregnancy, cardiac disorders or presence of cardiac pacemaker, hemorrhagic diathesis, neurological disorders, vesicoureteral reflux, menorrhagia, urinary tract infection or vaginitis, grade 3 or more pelvic organ prolapse, and presence of an intrauterine device.	pulse duration and a maximal output current of 24–60 mA were used for 20 min for 6–8 weeks, three times per week. A frequency of 5–10 Hz was used for urge incontinence, and stimulation up to the maximal tolerable level was given. **Posterior tibial nerve stimulation (n=21):** PTNS was performed as suggested by Cooperberg and Stoller. The Urgent PC Neuromodulation System was used for stimulation with a 34-gauge needle inserted about 3–4 cm cephalad to the medial malleolus, between the posterior margin of the tibia and soleus muscle. Correct position was confirmed by flexion of the great toe or fanning of the toes and a tingling sensation. Voltage pulse intensity was adjusted so that the patient did not have any pain sensation. A fixed pulse width of 200 and a frequency of 20 Hz were used. The treatment was performed weekly in 30-min sessions for 12 weeks.		PTNS (n=17): 394.98 (214.7)	1.1: Probably yes, participants were randomly allocated to treatments using computer based system 1.2: No information, allocation concealment not mentioned 1.3: No, no significant differences between groups at baseline Domain 2: Deviations from intended interventions: Some concerns 2.1: Yes, participants not blinded - also the duration of the intervention and number of sessions received different between the groups 2.2: Yes, carers and people delivering the interventions not blinded 2.3: No information whether there were any deviations from

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Research Fund of Istanbul University					the intended intervention Domain 3: Missing outcome data: Low risk 3.1: Probably no, 9.2% in PFMT group and 8.1% in control group dropped out 3.2: Probably no, no evidence that the results were not biased by missing outcome data 3.3: Probably no, missingness of the outcome was not dependent on its true value Domain 4: Measurement of the outcome: Some concerns 4.1: Probably no, outcomes clearly defined, but missing some information

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					regarding scoring. Unclear how questionnaire was administered 4.2: Probably no, outcomes unlikely to differ between treatment arms 4.3: Probably yes, outcomes were self-report and participants were not blinded 4.4: Probably no, both groups received treatment therefore expectations are likely to be similar between groups Domain 5: Selection of the reported result: Some concerns 5.1: No, no pre-panned analysis or protocol available 5.2: No, descriptive data presented 5.3: No, data presented as expected

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 6: Overall judgment of bias: Some concerns
Full citation Hagen, S., Elders, A., Stratton, S., Sergenson, N., Bugge, C., Dean, S., Hay-Smith, J., Kilonzo, M., Dimitrova, M., Abdel-Fattah, M., Agur, W., Booth, J., Glazener, C., Guerrero, K., McDonald, A., Norrie, J., Williams, L. R., McClurg, D., Effectiveness of pelvic floor muscle training with and without electromyographic biofeedback for urinary incontinence in women: multicentre randomised controlled trial, BMJBmj, 371, m3719, 2020a **Ref Id** 1290356	**Sample size** N=600 **Characteristics** Mean (SD) age (years): PFMT + BF group 48.2 (11.6); PFMT group 47.3 (11.4) Mean (SD) body mass index: PFMT + BF group 28.6 (5.9); PFMT group 28.3 (6.2) Type of incontinence (n, %): • Stress: PFMT + BF group 116 (38.7); PFMT group 116 (38.7) • Mixed (stress more troublesome): PFMT + BF group 108 (36.0); PFMT group 109 (36.2) • Mixed (stress and urgency equally troublesome): PFMT + BF group 42	**Interventions** Participants in both groups were offered six face-to face appointments (weeks 0, 1, 3, 6, 10, and 15; 60 minutes for the first appointment and 30 minutes for subsequent appointments) with a therapist (an experienced physiotherapist, nurse, or other continence clinician) who had received training in intervention delivery. **PFMT + Biofeedback (n=300):** electromyographic biofeedback was integrated with PFMT during the appointments. In addition, participants were given the same biofeedback device as used during appointments for their home use with a prescribed programme, along with information on operating, cleaning, and output interpretation. The devices stored usage information and the participants recorded the use of the biofeedback device in their exercise diaries. PFMT as described below.	**Details** The primary outcome was severity of urinary incontinence (ICIQ-UI SF) at 24 months. The ICIQUI SF score ranges from 0 to 21 and is the weighted sum of three items addressing urinary incontinence frequency (“how often do you leak urine?” 0=never to 5=all the time), leakage quantity (“how much urine do you usually leak?” 0=none to 6=a large amount), and interference with everyday life (0=not at all to 10=a great deal). Higher scores reflect greater severity. Relevant secondary outcomes were cure (never or none responses to ICIQ-UI SF frequency or quantity items) and improvement in	**Results** **Adherence (mean number of appointments attended, 0-6)** • PFMT + BF group: 4.2 (1.9) • PFMT group: 4 (2.1) **ICIQ-UI SF** 6 months • PFMT + BF group (n=221): 9.0 (5.0) • PFMT group (n=221): 8.8 (4.5) 12 months • PFMT + BF group (n=249): 9.1 (4.9) • PFMT group (n=252): 8.7 (5.0) 24 months • PFMT + BF group (n=225): 8.2 (5.1) • PFMT group (n=235): 8.5 (4.9) **Cure (Negative response to both “how often do you leak urine?” and “how much urine do you usually leak?”; n, %)**	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, web based randomisation was used 1.2 Probably yes, states that a centralised centre carried out randomisation 1.3 No, no significant differences between groups in terms of baseline characteristics Low risk 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 Probably no, no information regarding deviations from the intended protocol, there was some non-adherence

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out UK **Study type** RCT **Aim of the study** To assess whether PFMT plus electromyographic biofeedback in the clinic and at home would be more effective than PFMT alone for reducing the severity of incontinence in women with stress or mixed urinary incontinence. **Study dates** Participant recruitment took place between February 2014 and July 2016 **Source of funding** This trial was funded by the National Institute for Health Research (NIHR), Health Technology	(14.0); PFMT group 42 (14.0) • Mixed (urgency more troublesome): PFMT + BF group 34 (11.3); PFMT group 33 (11.2) ICIQ-UI SF severity: • Mild or moderate (<13): PFMT + BF group 140 (48.1); PFMT group 149 (50.7) • Severe (≥13): PFMT + BF group 151 (51.9); PFMT group 145 (49.3) Mean (SD) POP-SS: PFMT + BF group 6.4 (5.7); PFMT group 6.7 (5.6) **Inclusion criteria** Women aged 18 years or older and newly presenting with clinically diagnosed stress or mixed urinary incontinence and urine leakage as the primary problem were potentially eligible for inclusion	**PFMT alone (n=300):** The therapist assessed the pelvic floor muscles, taught the correct technique for exercise, prescribed an individualised PFMT programme to be followed at home (aiming for three sets of exercises daily, recorded in an exercise diary), and used behaviour change techniques embedded in the protocols to encourage adherence. Bladder and bowel management information and lifestyle advice were provided as necessary.	urinary incontinence (reduction in ICIQ-UI SF score of ≥3 points), the Patient Global Impression of Improvement, measuring participants' perceptions of their urine leakage (1=very much better to 7=very much worse), the International Consultation on Incontinence Questionnaire-female lower urinary tract symptoms (12 items, three subscales: filling (0-15), voiding (012), and incontinence (0-20), higher scores worse),12 the International Consultation on Incontinence Questionnaire-lower urinary tract symptoms quality of life (19 items, total ranging from 19 to 76, higher scores worse), the EuroQol-5 dimension-3 level (EQ5D-3L) questionnaire (range	6 months • PFMT + BF group: 12/221 (5.4) • PFMT group: 13/223 (5.8) 12 months • PFMT + BF group: 16/250 (6.4) • PFMT group: 22/253 (8.7) 24 months • PFMT + BF group: 18/229 (7.9) • PFMT group: 20/238 (8.4) **Improvement (Reduction in International Consultation on Incontinence Questionnaire-urinary incontinence short form of ≥3 points from baseline; n, %)** 6 months • PFMT + BF group: 129/221 (58.4) • PFMT group: 133/221 (60.2) 12 months • PFMT + BF group: 148/249 (59.4) • PFMT group: 163/252 (64.7)	but this is unlikely due to the trial context 2.6 Yes, an intent to treat analysis was performed Some concerns 3.1 No, over 5% were did not respond to follow up questionnaire at both time points 3.2 No, no evidence that the results were not biased by the missing data 3.3 Probably not, the proportion lost to follow up are similar between the groups Low risk 4.1 No, a validated questionnaire was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an active intervention Low risk 5.1 Yes, there is a published protocol,

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Assessment programme (project No 11/71/03	**Exclusion criteria** Participants who had urgency urinary incontinence alone, a prolapse greater than stage II on examination (>1cm below the hymen on straining), were unable to contract pelvic floor muscles on digital examination when requested, had received formal instruction on PFMT in the preceding year (this was originally three years but was changed on 1 June 2015), were pregnant or had given birth in the past six months (this was originally one year but was changed on 1 June 2015), were receiving treatment for pelvic cancer, had neurological disease, could not provide informed consent because of cognitive impairment, were allergic or sensitive to nickel (this was added on 1 June 2015), or		−0.594 to 1) and EQ-5D visual analogue scale (range 0 to 100, higher scores better) [results for EQ5D not in paper or supplementary material], the pelvic organ prolapse symptom score (POP-SS; seven items, total ranging from 0 to 28, higher scores worse), an early non-validated version of the International Consultation on Incontinence Questionnaire-bowel short form (six items: difficulty emptying, urgency, leakage, frequency of defecation, stool consistency, and interference with everyday life, each scored individually), adherence to the home programme (PFMT with or without biofeedback as appropriate) recorded by the therapist at each appointment (programme	24 months • PFMT + BF group: 135/225 (60.0) • PFMT group: 147/235 (62.6) **"Very much better" or "much better" (Patient Global Impression of Improvement instrument; n, %)** 6 months • PFMT + BF group: 96/219 (43.8) • PFMT group: 85/221 (38.5) 12 months • PFMT + BF group: 101/249 (40.6) • PFMT group: 92/250 (36.8) 24 months • PFMT + BF group: 93/227 (41.0) • PFMT group: 90/236 (38.1) **ICIQ-FL Incontinence score (range 0-20); mean, SD** Baseline • PFMT + BF group (n=290): 9.8 (3.6) • PFMT group (n=294): 9.3 (3.4)	which contains prespecified analyses 5.2 No, all outcomes were reported 5.3 No, outcomes correspond to prespecified analyses Low risk Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	were participating in other urinary incontinence research		followed, yes or no), and, if missing, ascertained from participant exercise diaries and biofeedback unit data, and adherence to PFMT longer term self-reported in follow-up questionnaires.	6 months • PFMT + BF group (n=182): 7.1 (4.0) • PFMT group (n=178): 6.6 (3.8) 12 months • PFMT + BF group (n=188): 7.1 (3.9) • PFMT group (n=182): 6.6 (4.1) 24 months • PFMT + BF group (n=164): 7.0 (4.3) • PFMT group (n=169): 6.5 (4.0) **Filling score (range 0-15); mean, SD** Baseline • PFMT + BF group (n=289): 5.0 (2.8) • PFMT group (n=297): 4.8 (2.6) 6 months • PFMT + BF group (n=183): 3.7 (2.7) • PFMT group (n=176): 3.4 (2.3) 12 months • PFMT + BF group (n=187): 3.8 (2.7) • PFMT group (n=186): 3.6 (2.4) 24 months • PFMT + BF group (n=167): 3.4 (2.6)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT group (n=168): 3.5 (2.3) **Voiding score (range 0-12), mean SD** Baseline • PFMT + BF group (n=292): 2.0 (2.0) • PFMT group (n=294): 2.0 (2.1) 6 months • PFMT + BF group (n=182): 1.6 (1.8) • PFMT group (n=179): 1.4 (1.8) 12 months • PFMT + BF group (n=188): 1.5 (1.9) • PFMT group (n=186): 1.5 (1.8) 24 months • PFMT + BF group (n=165): 1.6 (1.8) • PFMT group (n=169): 1.6 (1.8) **ICI Q-LUTSqol (Overall (range 19-76); mean, SD)** Baseline • PFMT + BF group (n=292): 43.5 (12.3) • PFMT group (n=297): 42.3 (12.1) 6 months	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT + BF group (n=183): 36.2 (13.2) • PFMT group (n=176): 35.7 (11.9) 12 months • PFMT + BF group (n=189): 35.7 (13.3) • PFMT group (n=184): 34.7 (12.1) 24 months • PFMT + BF group (n=164): 34.3 (12.4) • PFMT group (n=169): 34.3 (12.5)	
Full citation Hagen, Suzanne, Bugge, Carol, Dean, Sarah G., Elders, Andrew, Hay-Smith, Jean, Kilonzo, Mary, McClurg, Doreen, Abdel-Fattah, Mohamed, Agur, Wael, Andreis, Federico, Booth, Joanne, Dimitrova, Maria, Gillespie, Nicola, Glazener, Cathryn, Grant, Aileen, Guerrero, Karen L., Henderson, Lorna, Kovandzic, Marija, McDonald,	**Sample size** See Hagen 2020a **Characteristics** See Hagen 2020a **Inclusion criteria** See Hagen 2020a **Exclusion criteria** See Hagen 2020a	**Interventions** See Hagen 2020a	**Details** See Hagen 2020a	**Results** **ICI Q-LUTSqol bother (Overall; mean, SD)** Baseline • PFMT + BF group (n=288): 7.4 (2.6) • PFMT group (n=288): 7.6 (2.5) 6 months • PFMT + BF group (n=183): 4.3 (3.1) • PFMT group (n=177): 4.3 (2.8) 12 months • PFMT + BF group (n=189): 4.0 (3.1) • PFMT group (n=184): 3.9 (3.0)	**Limitations** See Hagen 2020

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Alison, Norrie, John, Sergenson, Nicole, Stratton, Susan, Taylor, Anne, Williams, Louise R., Basic versus biofeedback-mediated intensive pelvic floor muscle training for women with urinary incontinence: the OPAL RCT, Health technology assessment (Winchester, England), 24, 1-144, 2020b **Ref Id** 1305144 **Country/ies where the study was carried out** See Hagen 2020 **Study type** See Hagen 2020 **Aim of the study** See Hagen 2020 **Study dates**				24 months • PFMT + BF group (n=163): 3.8 (3.1) • PFMT group (n=169): 3.7 (2.9) **Adherence (adherence during clinic appointment - any adherence in clinic; n (%))** PFMT + BF group (n=290): 231 (79.7) PFMT group (n=292): 231 (79.1)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
See Hagen 2020 **Source of funding** See Hagen 2020					
Full citation Hwang, U. J., Kwon, O. Y., Lee, M. S., Effects of surface electrical stimulation during sitting on pelvic floor muscle function and sexual function in women with stress urinary incontinence, Obstetrics & Gynecology ScienceObstet, 63, 370-378, 2020a **Ref Id** 1290364 **Country/ies where the study was carried out** Korea **Study type** RCT	**Sample size** N=34 **Characteristics** Age (mean, SD), years: ES group 42.3 (9.1); control group 41.1 (7.2) BMI (mean, SD), kg/m2: ES group 22.6 (2.8); control group 22.8 (3.5) Duration of symptoms (mean, SD), years: ES group 5.7 (3.6); control group 7.8 (6.0) **Inclusion criteria** • SUI diagnosed by a urogynecologist • Leakage episode occurring more than once per week • Body mass index <30 kg/m2 • Age between 30 and 60 years	**Interventions** **Electrical stimulation (n=17):** The EasyK7 is a SESdS device that stimulates the PFM and surrounding structures using 3 surface electrodes in contact with the perivaginal and sacral regions. Surface electrodes were positioned near each participant's anus and sacrum to stimulate both the perivaginal and sacral regions, with the subject sitting on the EasyK7 device. Subjects were asked to sit on the device to ensure that both electrodes made contact with the perivaginal and sacral regions. The amplitude used for stimulation was set to a comfortable level for each subject. The EasyK7 delivered biphasic and asymmetric impulses of 25 Hz at pulses of 11 seconds, with an 11-second rest period between pulses. The mean intensities used were	**Details** Female sexual function was measured using the Korean version of the pelvic organ prolapse–urinary incontinence sexual function questionnaire (PISQ). The PISQ is a 31-item questionnaire with the responses based on a 5-point Likert scale. The total PISQ-31, physical domain, behavioural/emotive domain, and partner-related domain scores range from 0 to 125, 0 to 40, 0 to 61, and 0 to 24, respectively. In all domains, higher scores indicate better sexual function.	**Results** **PISQ - Behavioural/emotive score** Pre-intervention • Intervention group: 26.94±13.43 • Control group: 26.56±11.78 Post intervention • Intervention group: 33.25±15.45 • Control group: 23.56±10.37 **PISQ - Physical score** Pre-intervention • Intervention group: 30.06±4.54 • Control group: 34.81±3.29 Post intervention • Intervention group: 34.56±2.97 • Control group: 35.13±4.10 **PISQ - Partner related score** Pre-intervention	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, a randomisation website was used 1.2 No information, allocation concealment is not mentioned 1.3 Probably no, the control group participants duration of symptoms was longer (7.8 vs 5.7 years), but this was not statistically significant Some concerns 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To investigate the effects of surface electrical stimulation during sitting (SESdS) on PFM function and sexual function in women **Study dates** September 2018 and December 2018 **Source of funding** The authors received financial and administrative support from the Yonsei University Research Fund	• Non-smoker • Not addicted to alcohol or drugs • Successfully completed the medical screening questionnaire **Exclusion criteria** • Urogenital prolapse grade III or higher Cardiac pacemaker • Device implanted in the pelvis or hip joint Pregnant/planning to get pregnant • Pelvic or abdominal surgery within the last 6 months • Aversion to SESdS • Concomitant treatment for SUI during the trial period • Neurological or psychiatric disease Urinary tract infection	19.37±6.29 mA (range, 2.5–30 mA). Each EasyK7 session was 15 minutes long. The subjects in the SESdS group were provided with an EasyK7 device and shown how to use and maintain the device correctly. These subjects were instructed to use the device for a single 15-minute session per day for 5–6 days per week, for a total of 8 weeks. In addition, the subjects were permitted to increase the EasyK7 stimulation amplitude within tolerable limits. **Control group (n=17):** Control group subjects walked for more than 20 minutes in lieu of EasyK7 treatments. At the end of the 8-week intervention period, control group participants were provided with an EasyK7 device as a reward to all subjects for participating in the study.		• Intervention group: 18.69±2.36 • Control group: 18.25±2.08 Post intervention • Intervention group: 20.13±1.71 • Control group: 18.13±2.19 **PISQ - Total score** Pre-intervention • Intervention group: 75.69±16.42 • Control group: 79.63±14.29 Post intervention • Intervention group: 87.69±16.76 • Control group: 76.81±12.10	participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol 2.6 Probably not, the authors excluded participants who were lost to follow up 2.7 Probably no, only on participant missing from each group Some concerns 3.1 Probably no, 5.88% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, reasons for both participants dropping out were unrelated to condition/outcome Low risk 4.1 No, the PSIQ is a validated questionnaire 4.2 No, the measurement could not have differed between groups

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably yes, as the control group did not receive an active intervention and so may not expect any improvements 4.5 Probably yes, as the control group did not receive an active intervention High risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 Probably yes, the published protocol includes several outcome measures which are not reported in the paper 5.3 No information, an analysis plan is not published High risk Overall rating: High risk of bias
Full citation Hwang, U. J., Lee, M. S., Jung, S. H., Ahn,	**Sample size** See Hwang 2020a	**Interventions** See Hwang 2020a	**Details** Subjective symptoms were determined via	**Results** **UDI-6** Baseline	**Limitations** Cochrane Risk of Bias Tool (version 2)

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
S. H., Kwon, O. Y., Which pelvic floor muscle functions are associated with improved subjective and objective symptoms after 8 weeks of surface electrical stimulation in women with stress urinary incontinence?, European Journal of Obstetrics, Gynecology, & Reproductive BiologyEur J Obstet Gynecol Reprod Biol, 247, 16-21, 2020b **Ref Id** 1290527 **Country/ies where the study was carried out** South Korea **Study type** RCT **Aim of the study** To determine the effects of SES in the seated position on PFM functions and	**Characteristics** See Hwang 2020a **Inclusion criteria** See Hwang 2020a **Exclusion criteria** See Hwang 2020a		completion of the urogenital distress inventory-6 (UDI-6).	• ES group: 40.28 (12.26) • Control group: 38.89 (19.99) 8 weeks • ES group: 30.55 (11.18) • Control group: 39.55 (17.35)	1.1 Yes, a randomisation website was used 1.2 No information, allocation concealment is not mentioned 1.3 Probably no, there is a difference duration of symptoms at baseline, although according to the paper this is not statistically significant Low risk 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol, further, adherence was assessed but not reported

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
subjective and objective symptoms, and to identify predictors of improved subjective and objective symptoms after 8 weeks of SES training via secondary analysis of females with SUI. **Study dates** August to December 2018 **Source of funding** The authors received financial and administrative support from the Yonsei University Research Fund					2.6 Probably no, per protocol analysis was used, excluding participants who dropped out 2.7 Probably no, only one participant missing per group Some concerns 3.1 No, over 5% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably no, states reasons for drop out which are not related to the treatment/outcomes Low risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report 4.4 Probably yes, as the control group did

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					not receive an active intervention 4.5 Probably yes Some concerns 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 Probably yes, the protocol includes additional outcomes that are not reported 5.3 No information, an analysis plan is not published High risk Overall rating: High risk of bias
Full citation Jha, S., Walters, S. J., Bortolami, O., Dixon, S., Alshreef, A., Impact of pelvic floor muscle training on sexual function of women with urinary incontinence and a comparison of electrical stimulation versus standard treatment (IPSU trial): a randomised	**Sample size** N=114 women **Characteristics** Women referred to secondary care, within the hospital or community, with urinary incontinence who, following clinical assessment or urodynamic studies, are deemed to require PFMT. No significant demographic	**Interventions** **PFMT plus electrical stimulation n=57** was the intervention. The technique for PFMT was as recommended by NICE. This comprised at least eight contractions performed three times a day. This was supervised by the Women's Health Physiotherapy team and included three members. They were all trained in the provision of PFMT and were members of	**Details** Assessments were made at baseline (prior to commencing PFMT), and approximately 6 months randomisation. The primary outcome was the self-reported Prolapse and Incontinence Sexual function Questionnaire (PISQ-31)	**Results** PISQ score range: 1 to 125, higher score indicates better sexual functioning. Before and after change (both treatments combined): PISQ total score mean change +5.9 (95% CI +2.9 to +8.9), p<0.001 showing small but statistically significant improvement. Comparing control to intervention adjusted	**Limitations** Cochrane risk of bias tool (v2) 1. Randomisation (Low): Allocation was through block randomisation (with a variable block size an integer multiple of two) stratified by menopausal status (Pre or post menopausal). The

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
controlled trial, Physiotherapy (United Kingdom), 104, 91-97, 2018 **Ref Id** 827281 **Country/ies where the study was carried out** UK **Study type** Randomised controlled trial - Single centre two arm parallel group **Aim of the study** To evaluate the clinical and cost-effectiveness of electric stimulation plus standard pelvic floor muscle training compared to standard pelvic floor muscle training alone in women with urinary incontinence and sexual dysfunction **Study dates**	differences between the two groups. **Inclusion criteria** Sexually active, over the age of 18 yrs and with urinaryincontinence attending for PFMT. Women scoring greater than 25% on the urinary domainof the sexual function dimension, and/or greater than 33%for the degree of bother for the same symptom. **Exclusion criteria** • Women with prolapse as their predominant problem. • Women who have had any previous incontinence surgery. • Women who have a Grade 3 or above muscle strength as measured using the modified Oxford Scale on vaginal examination. • Women with vaginal discharge or UTI.	the Association of Chartered Physiotherapists in Women's Health (ACPWH). **PFMT n=57** (Pelvic floor muscle training) was the control and	physical function dimension, at six months post randomisation. Secondary outcomes included the other dimensions of PISQ-31(Behavioral Emotive dimension and Partner-Related dimension scores); SF-36 domain scores; EQ-5D score; ePAQ urinary & sexual domain scores, adverse events resource use, and cost-effectiveness.	mean difference: PISQ total score +1.1 (95% CI -5.9 to +8.2), p=0.748. Not statistically significant difference. Significant improvement when comparing before and after any treatment, but no significant difference between intervention and control.	study statistician generated a randomisation schedule using the STATA software. Nottingham University Clinical Trials Research Unit (CTRU) Set-up and hosted a web based randomisation system, for a two arm trial with 114 participants, stratified by menopausal status. 2. Deviation from intervention (Low): No deviations mentioned 3. Missing outcome data (Some concerns): 50 out of 114 did not have valid follow-up outcome data (44% attrition).Multiple imputation was used to impute missing data on the primary outcome. Data was imputed using chained equations, (regression) with 20 imputations using base-line, follow-

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Participants were recruited between 01.12.2012 and 30.11.2015 and followed up at 4 to 6 weekly intervals. **Source of funding** National Institute for Health Research (NIHR) under its Research for Patient Benefit (RfPB) Programme	• Women fitted with an implanted pacemaker. • Women fitted with a copper coil IUD • Women who were pregnant. • Women with undiagnosed pelvic pain. • Women with a known sensitivity to the electrodes or the electrode gel. • Women with inflammation or infection of the vulva and vagina. • Women who had experienced recent haemorrhage or haematoma. • Women with Atrophic vaginitis. • Any other medical condition or abnormality (e.g. malignancy or complication) that in the opinion of the investigator would impact upon the safety or efficacy of the study treatment or any study assessments. • The patient was already enrolled in				up, menopausal status, time from randomisation, body mass index, diastolic blood pressure, SF36 physical score, SF-36 mental score, and baseline oxford scale. 4. Outcome measurement (Low): clinicians blinded during final visit 5. Selective reporting (Low): No selective reporting mentioned 6. Overall bias (Low/Some concerns/High): Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	another interventional trial. • Non-English speaking women or with a specific language problem.				
Full citation Karaman, E., Kaplan, S., Kolusari, A., The effect of neuromuscular electrical stimulation therapy on stress urinary incontinence recurrence: a randomized prospective study, Eastern Journal of Medicine, 25, 506-512, 2020 **Ref Id** 1290343 **Country/ies where the study was carried out** Turkey **Study type** RCT	**Sample size** N=48 **Characteristics** Age, years (mean ± SD): Combination group 42.3±7.1; Kegel group 41.8±8.6 BMI, mean ± SD: Combination group 22.4±3.2; Kegel group 23.5±2.6 Type of urinary incontinence, n/% • Stress UI: Combination group 17/20; Kegel group 85% 24/28, 85.7% • Mixed UI: Combination group 3/20; Kegel group 15% 4/28, 14.3% **Inclusion criteria** The patients who had diagnosis of predominantly stress	**Interventions** **PFMT (Kegel exercises) + functional neuromuscular electrical stimulation n=20 :** Innovo device was used for external electrical neuromuscular stimulation. Each patient was asked to sit on a comfortable table and eight external electrodes with a combined stimulating surface region of 1526 cm2 and a current density of 0.03 mA/cm2 , which were applied to the buttocks, outer hips, and the anterior and posterior proximal thighs for a 30- min treatment protocol for two times per week lasting for 4 weeks. Subjects were encouraged to change their neutral standing position during the 30-min stimulation by changing the pelvic inclination angle slightly and internally/externally rotating the hips. These positional changes altered the current	**Details** The Quality of life (QOL) of patients were assessed by the Wagner's QOL scale at the end of therapy with Turkish version. The patients were asked to fill this questionnaire, answers were pointed as 0, 1, 2, 3 and the total score was noted. The score were accepted as followings: 0= no 1-28: mild, 29-56: moderate, 57-84 severe leakage or psychiatric deterioration	**Results** **Quality of life (mean and SD), post-intervention** Baseline not reported • Combination group 7.3±6.2 • Kegel group 18.4±6.52 **The number of UI recurrence, n/%** • Combination group 2/20, 10% • Kegel group 5/28, 17.8%	**Limitations** Cochrane risk of bias tool (v2) 1.1 No information, said to be randomised but method of randomisation not reported 1.2 No information, sequence allocation not reported 1.3 No, no significant differences between groups at baseline Some concerns 2.1 Yes, participants were aware of their group assignment 2.2 Yes, carers and people delivering the interventions were aware of participants assignment 2.3 No information, no mention of deviations from the protocol 2.6 Probably yes, no participants were

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To evaluate the effect of functional electrical stimulation therapy with a novel innovative device on stress urinary incontinence recurrence and Quality of life of patients who underwent anti-incontinence surgery in the postoperative period. **Study dates** March 2019-June 2020 **Source of funding** This study was supported by the Van Yuzuncu Yil University, Department of Scientific Research Project (BAP) with the approval number of TSA-2019-7689	urinary incontinence and underwent anti-incontinence surgery either TVT or TOT operations were recruited. The diagnosis of urinary incontinence was made according to the physical examination including stress urinary leakage test, urinalysis and urodynamic findings before operation. **Exclusion criteria** The patients who had followings were excluded from study: patients who had chronic severe diseases, who have cardiac pacemakers, who are pregnant, who had neurological or psychiatric disorders, who had urinary tract infections.	way and patients were able to target the stimulus more anteriorly toward the bladder neck or more posteriorly toward the anal region. A symmetric biphasic pulse was implemented. Kegel exercise was carried out as described below. **PFMT (Kegel exercise) alone n=28 :** Kegel exercise at least three sets of 10 to 15 repetitions a day for one month during the study period			excluded from the analysis Some concerns 3.1 Yes, all data was available Low risk 4.1 No, validated questionnaires were used 4.2 No, measurement is unlikely to differ between groups 4.3 Yes, outcome assessors were aware as self report measures were used 4.4 Probably not, as both groups received an active intervention Low risk 5.1 No information, no protocol 5.2 No information, an analysis plan is not reported 5.3 No information, an analysis plan is not reported Some concerns Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Full citation Kucukkaya, B., Kahyaoglu Sut, H., Effectiveness of pelvic floor muscle and abdominal training in women with stress urinary incontinence, Psychology Health & MedicinePsychol Health Med, 1-8, 2020 **Ref Id** 1290355 **Country/ies where the study was carried out** Turkey **Study type** RCT **Aim of the study** The aim of this prospective randomized controlled study was to investigate the effectiveness of combined PFMT and	**Sample size** N=64 **Characteristics** Age (mean, SD), years: PFMT + abdominal exercises 39.0 (9.1); PFMT alone 38.2 (10.0) BMI (mean, SD), kg/m2: PFMT + abdominal exercises 27.8 (5.8); PFMT alone 28.5 (6.9) **Inclusion criteria** Those from the age of 18 to 49 years, those meeting the diagnosis of women with type 0 or I SUI, and those willing to participate in the stud **Exclusion criteria** Not reported	**Interventions** **PFMT + abdominal exercises** (n=32): no further details **PFMT alone** (n=32): no further details Both groups were taught their exercises at the clinic, and the patients then performed the exercises individually in their daily lives (at home, work, etc.) with no supervision. They were provided with a brochure that included a detailed explanation of the applicable exercise programs and healthy lifestyle behaviours. The intervention was 8 weeks.	**Details** Completion of the UDI-6 and IIQ-7 were performed at the 0th, 4th, and 8th (end of intervention) weeks.	**Results** **IIQ (mean, SD)** Baseline • PFMT + abdominal: 58.2 (32.0) • PFMT alone: 51.3 (32.6) End of intervention (8 weeks) • PFMT + abdominal: 0.6 (2.7) • PFMT alone: 5.1 (7.1) **UDI-6 (mean, SD)** Baseline • PFMT + abdominal: 60.9 (28.5) • PFMT alone: 54.7 (28.1) End of intervention (8 weeks) • PFMT + abdominal: 1.3 (4.3) • PFMT alone: 8.6 (10.9)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 No information, just states that they were randomly allocated 1.2 No information, allocation concealment is not mentioned 1.3 No, no significant differences between groups Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 No information regarding deviations from the intended protocol 2.6 Probably yes, an intent to treat analysis was performed including all participants Some concerns 3.1 Yes, there was no loss to follow up

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
AT in reproductive age women with SUI. **Study dates** Between September 2016 and March 2017 **Source of funding** This study was supported as a research project by Trakya University Research Foundation					Low risk 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an intervention Low risk 5.1 No information, a study protocol is reported but there is no analysis plan 5.2 Probably no, the study protocol lists outcomes which are reported in the paper 5.3 No information Some concerns Overall judgement: Some concerns
Full citation Liang, Y., Li, X., Wang, J., Liu, Y., Yang, Yang, Dong, M., Effect of Pelvic Floor Muscle Training on Improving Prolapse-related	**Sample size** N=97 **Characteristics** Age (mean, SD), years: PFMT+A 61.6 (7.69); Advice 63.3 (9.41)	**Interventions** **PFMT + Lifestyle advice (n=49)**: Participants received 4 PFMT appointments with physiotherapists with each instruction lasting for 20 to 30 minutes. During the first 3 appointments, the	**Details** Outcomes were measured at baseline, discharge, 40 days after surgery and 60 days after surgery.	**Results** **For all timepoints, PFMT+advice group n=47; Advice alone group n=43** **POPDI-6 (mean, SD; final score)**	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, a random number generator was used

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Symptoms After Surgery, Journal for Nurse Practitioners, 15, 600-605, 2019 **Ref Id** 1273418 **Country/ies where the study was carried out** China **Study type** RCT **Aim of the study** To explore the effect of PFMT on the improvement of pelvic floor symptoms after POP surgery to better guide the work of nurse practitioners. **Study dates** Between October 2015 and October 2017 **Source of funding** Not reported	BMI (mean, SD), kg/m2: PFMT+A 27.43 (3.91); Advice 29.52 (5.71) **Inclusion criteria** Women of any age who were going to receive prolapsed surgery **Exclusion criteria** Women who were pregnant; had current treatment for another (uro)gynecologic disorder, malignancy of pelvic organs, impaired mobility, severe or terminal illness, cognitive impairment, or an insufficient command of the Chinese language; or were unwilling to participate in this research	physiotherapists would teach and confirm that all of the participants could do the right contraction by putting a finger at the 5 or 7 o'clock position of their virginal openings. Then, physiotherapists would instruct the patients to take a standing or sitting position and perform slow contraction and slow relaxation. The goal is to contract for 10 seconds and relax for 10 seconds to increase the support strength of the patient's pelvic floor muscle. At the same time, rapid contraction and relaxation can be performed, namely, contraction for 1 second and relaxation for 1 second, to increase the instant strength of the pelvic floor muscles and to enhance the ability of patients to control urination. Participants were instructed to exercise for 15 to 30 minutes every time 2 to 3 times a day or 100 to 150 times a day at any time. To guarantee the compliance of PFMT, participants were asked to exercise as instructed by physiotherapists under the supervision of their nurses in charge during their hospital		Baseline • PFMT + Advice: 34.00 ± 26.00 • Advice: 35.17 ± 27.60 Discharge • PFMT + Advice: 9.7 ± 10.27 • Advice: 11.09 ± 10.21 40 days post surgery • PFMT + Advice: 3.73 ± 4.72 • Advice: 3.19 ± 5.28 60 days post surgery • PFMT + Advice: 1.61 ± 3.54 • Advice: 2.93 ± 4.50 **CRADI-8 (mean, SD; final score)** Baseline • PFMT + Advice: 11.32 ± 9.96 • Advice: 12.68 ± 16.00 Discharge • PFMT + Advice: 7.73 ± 14.66 • Advice: 10.18 ± 15.68 40 days post surgery • PFMT + Advice: 3.65 ± 6.78 • Advice: 4.82 ± 7.09 60 days post surgery • PFMT + Advice: 3.72 ± 6.07	1.2 Probably yes, states that the group allocation was stored separate from the clinic and concealed in an opaque numbered envelope 1.3 No, no significant differences at baseline Low risk 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol, further, adherence was assessed but not reported (exercise logs were not collected) 2.6 Probably no, per protocol analysis was used, excluding

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		stay. Handwritten instructions and a notebook for keeping a log of exercise were provided at discharge. Participants also received lifestyle advice as below. **Lifestyle advice alone (n=48):** Participants were given routine lifestyle health guidance at admission, postoperative checkup, discharge, and 42 days after surgery, each time for 20 minutes, including the following aspects: explaining the causes of POP, common complications after POP, causes of complications after POP, and healthy lifestyle, including the avoidance of activities that would increase abdominal pressure, effective treatment about chronic cough and constipation, maintaining a healthy diet by eating more vegetables and fruits and drinking more water etc. At discharge, all participants were given a leaflet concerning lifestyle health guidelines.		• Advice: 4.29 ± 6.36 **UDI-6 (mean, SD; final score)** Baseline • PFMT + Advice: 31.84 ± 22.04 • Advice: 30.43 ± 22.06 Discharge • PFMT + Advice: 19.49 ± 15.64 • Advice: 16.20 ± 12.60 40 days post surgery • PFMT + Advice: 6.67 ± 6.96 • Advice: 11.59 ± 12.05 60 days post surgery • PFMT + Advice: 3.94 ± 7.96 • Advice: 9.60 ± 11.76 **PFDI-20 (mean, SD; final score)** Baseline • PFMT + Advice: 76.53 ± 36.75 • Advice: 78.29 ± 47.11 Discharge • PFMT + Advice: 36.93 ± 27.51 • Advice: 37.47 ± 30.58 40 days post surgery • PFMT + Advice: 14.05 ± 11.00	participants who dropped out 2.7 Probably yes, over 5% missing overall High risk 3.1 No, over 5% missing from the advice alone group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 No information, reasons for loss to follow up are unclear ('loss to follow up' and 'discontinuation due to motivation problems) 3.4 Probably yes, a greater proportion dropped out in the advice alone group (10.4%) compared to the PFMT and advice group (2%) High risk 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• Advice: 19.61 ± 17.31 60 days post surgery • PFMT + Advice: 9.27 ± 12.01 • Advice: 16.82 ± 17.88	assignment as it was self-report 4.4 Probably yes, as the control group did not receive an active intervention 4.5 Probably yes Some concerns 5.1 No information, there is no protocol 5.2 No information 5.3 No information Some concerns Overall rating: High risk of bias
Full citation Mallmann, S., Ferla, L., Rodrigues, M. P., Paiva, L. L., Sanches, P. R. S., Ferreira, C. F., Ramos, J. G. L., Comparison of parasacral transcutaneous electrical stimulation and transcutaneous posterior tibial nerve stimulation in women with overactive bladder syndrome: A randomized clinical	**Sample size** N=50 **Characteristics** Age (years), mean (SD): 61.48 (10.10) BMI (kg/cm2), mean (SD): 30.28 (5.39) Main complaint, n (n%) • UUI 9 (18.0) • MUI 41 (82.0) Depression/anxiety, n (n%) • Yes: 11 (22.0) • No: 39 (78.0)	**Interventions** **Parasacral transcutaneous electrical stimulation (PS):** The PS group used a portable electrical stimulator with a pair of adhesive Carcitrode electrodes (9 x 5 cm). The patients were instructed about the correct position of the electrodes on the bilteral sacral roots. **Transcutaneous posterior tibial nerve stimulation (PTN)**: The PTN group used a portable electrical stimulator and a neoprene anklet with Silver Spike Point	**Details** The following outcomes were evaluated pre-intervention and post-intervention: quality of life (KHQ), severity of incontinence [Incontinence Severity Index (ISI)] and the degree of discomfort caused by OAB symptoms [Overactive Bladder-Validated 8- question Awareness Tool (OAB-V8)].	**Results** **KHQ symptoms, mean (SD)** Pre-intervention • PS: 15.44 (4.12) • PTN: 15.67 (4.64) Post-intervention • PS: 11.24 (5.26) • PTN: 9.84 (5.83) **ISI, n (n%)** **Mild** Pre-intervention • PS: 2 (8.0) • PTN: 0 (0) Post-intervention	**Limitations** Cochrane risk of bias tool (v2) 1.1 Yes, said to be computer generated 1.2 No information, sequence allocation not reported 1.3 No, no significant differences between groups at baseline Low risk 2.1 Yes, participants were aware of their group assignment

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
trial, European Journal of Obstetrics, Gynecology, & Reproductive BiologyEur J Obstet Gynecol Reprod Biol, 250, 203-208, 2020 **Ref Id** 1290324 **Country/ies where the study was carried out** Brazil **Study type** RCT **Aim of the study** To compare the effects of both forms of transcutaneous electrical stimulation on quality of life and severity of symptoms in women diagnosed with OAB **Study dates** July 2017 to September 2018	**Inclusion criteria** Woman aged >18 years with OAB symptoms, with or without UUI or MUI, who agreed to participate were included in the study **Exclusion criteria** Exclusion criteria were the presence of vaginal or urinary infection, neurological pathologies, and inability to perform treatment or answer the evaluation questionnaires	electrodes in the medial region of the right ankle. Each anklet was adjusted individually according to the correct position of the posterior tibial nerve. The patients in the PTN group were instructed to apply a conductive gel to the skin in contact with the anklet. Both groups followed the same protocol at home for 6 weeks, with electrical stimulation applied three times per week. The electrical stimulation parameters were wavelength of 300 ms, frequency current of 20 Hz, and application time of 20 min. Patients were advised to set the intensity of stimulation to the maximum tolerable threshold. All patients were informed about behavioural therapy (intake of irritative liquids, vesical training, bladder inhibition reflex, restriction of liquid intake at night).	The OAB-V8 and all but one of the KHQ domains ('symptoms' domain) were reported as median and 95% CI and so could not be extracted. ISI was reported as number and %.	• PS: 3 (14.3) • PTN: 6 (24.0) **Moderate** Pre-intervention • PS: 4 (16.0) • PTN: 8 (32.0) Post-intervention • PS: 14 (66.7) • PTN: 11 (44.0) **Severe** Pre-intervention • PS: 11 (44.0) • PTN: 8 (32.0) Post-intervention • PS: 4 (19.0) • PTN: 8 (32.0) **Very severe** Pre-intervention • PS: 8 (32.0) • PTN: 9 (36.0) Post-intervention • PS: 0 (0) • PTN: 0 (0)	2.2 Yes, carers and people delivering the interventions were aware of participants assignment 2.3 No information, no mention of deviations from the protocol 2.6 Probably no, per protocol analysis was used which excluded participants who were lost to follow up 2.7 Probably yes, 16% were missing at follow up in one of the groups High risk 3.1 No, 16% were missing from group 1 3.2 No, no evidence that the results were not biased by missing data 3.3. Probably yes, reasons for drop out were not reported 3.4 Probably yes, differences between the groups in terms of the proportion of missing data (16% vs 0%) High risk 4.1 No, validated questionnaires were used

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding No funding					4.2 No, measurement is unlikely to differ between groups 4.3 Yes, outcome assessors were aware as self report measures were used 4.4 Probably not, as both groups received an active intervention Low risk 5.1 Probably no, there is a published protocol, however the this does not include intentions for analysis other than which outcomes will be measured 5.2 No, the protocol does include outcome measures which are reported in the paper 5.3 No information, an analysis plan is not reported Some concerns Overall judgement: High risk
Full citation Mundet, L., Rofes, L., Ortega, O., Cabib, C., Clave, P., Kegel Exercises, Biofeedback, Electrostimulation,	**Sample size** N=180 **Characteristics** Mean age (SD): 61.09 ± 12.17 years Parity: 169 (96.6%)	**Interventions** **PFMT + Biofeedback (n=45):** In addition to PFMT, patients received six 45-minute BF sessions administered by a specialist nurse. BF training was	**Details** Primary endpoint was the change before and after treatments in the severity score (Cleveland score);	**Results** **Cleveland score (clinical severity)** Baseline • PFMT: 10.92 ± 4.14 • PFMT + BF: 12.08 ± 3.27	**Limitations** Cochrane Risk of Bias Tool (version 2) 1.1 Yes, computer generated

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
and Peripheral Neuromodulation Improve Clinical Symptoms of Fecal Incontinence and Affect Specific Physiological Targets: An Randomized Controlled Trial, Journal of neurogastroenterology and motilityJ Neurogastroenterol Motil, 28, 28, 2020 **Ref Id** 1290412 **Country/ies where the study was carried out** Spain **Study type** RCT **Aim of the study** The aim is to assess the clinical efficacy of these 4 treatments on community-dwelling women with FI and their impact on severity, QoL and anorectal physiology.	**Inclusion criteria** Patients attending the gastrointestinal physiology unit from February 2013 to March 2017 with a history of more than 6 months of FI symptoms were consecutively screened. **Exclusion criteria** Patients with mild FI (Cleveland < 4), under 18 years of age, and those unable to follow the treatment properly were excluded.	focused on the strengthening of the EAS muscle and the coordination of EAS contraction with rectal distention. Sensory training was not performed. Patients laid down looking at a monitor that mirrored the tracings of a manometric BF unit. The type of exercises was the same as PFMT. **PFMT + electrical stimulation (n=45):** In addition to PFMT, patients were instructed on the home use of an electric stimulation unit (Elpha 3000 Conti; Danmeter A/S, Odense, Denmark) with a “Periform+” endovaginal probe (Neen Healthcare, Dereham, UK). The stimulator was to be used for 30 minutes a day, 5 days a week, set at a frequency of 35 Hz, pulse-width of 300 microseconds with cycles of 0.5-second ramp-up, 5 seconds on, 0.5-second ramp-down, and 5 seconds off. Patients were told to increase intensity until reaching their tolerance threshold. A fourth group included PFMT + neuromodulation, however this was not	secondary outcomes included ICIQ, Fecal Incontinence Quality of Life (FIQL) score and EQ-5D	• PFMT + ES: 11.54 ± 3.70 Follow up • PFMT: 7.46 ± 4.42 • PFMT + BF: 7.08 ± 5.39 • PFMT + ES: 5.85 ± 4.71 **FIQL score** **Lifestyle** Baseline • PFMT: 3.02 ± 0.65 • PFMT + BF: 3.04 ± 0.78 • PFMT + ES: 3.14 ± 0.76 Follow up • PFMT: 3.38 ± 0.62 • PFMT + BF: 3.46 ± 0.69 • PFMT + ES: 3.53 ± 0.67 **Depression** Baseline • PFMT: 2.85 ± 0.75 • PFMT + BF: 2.76 ± 0.63 • PFMT + ES: 2.88 ± 0.76 Follow up • PFMT: 3.18 ± 0.67 • PFMT + BF: 3.20 ± 0.78	randomisation was used 1.2 No information, allocation concealment is not reported 1.3 No information, baseline information between groups is not reported Some concerns 2.1 Yes, participants were aware which group they had been assigned to, due to the nature of the intervention 2.2 Yes, people delivering the interventions were aware of the assigned intervention of the participants, due to the nature of the intervention 2.3 No information, no details on whether there were any deviations from the protocol 2.6 Probably not, a per protocol analysis was used excluding participants who dropped out 2.7 Probably yes, more than 5% of participants

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates Not reported **Source of funding** Part of this research was funded through 2 PERIS grants from the Catalonian Health Department (SLT002/16/00214 and SLT008/18/00168). CIBERehd is funded by Instituto de Salud Carlos III, Barcelona, Spain.		included as it was not included in the protocol **PFMT (n=45):** Patients were given oral and written instructions on how to perform K at home. They had to exercise for 10 minutes 3 times a day for a 3-month period. The exercises included maximal fast and sustained squeeze exercises		• PFMT + ES: 3.36 ± 0.62 **Coping** Baseline • PFMT: 2.20 ± 0.78 • PFMT + BF: 2.23 ± 0.78 • PFMT + ES: 2.22 ± 0.78 Follow up • PFMT: 2.78 ± 0.76 • PFMT + BF: 2.91 ± 0.57 • PFMT + ES: 2.99 ± 0.83 **Embarrassment** Baseline • PFMT: 2.42 ± 0.79 • PFMT + BF: 2.41 ± 0.76 • PFMT + ES: 2.41 ± 0.74 Follow up • PFMT: 3.12 ± 0.84 • PFMT + BF: 3.05 ± 0.78 • PFMT + ES: 3.20 ± 0.77 **EQ5D** Baseline • PFMT: 0.66 ± 0.23 • PFMT + BF: 0.59 ± 0.26	not included in follow up High risk 3.1 No, over 5% missing from each group 3.2 No, no evidence that the results was not biased by excluding the participants 3.3 Probably yes, states reasons for drop out which included treatment related ones i.e. discomfort, inability to self-administer treatments 3.4 Probably no, proportion of missing data is similar in each group Some concerns 4.1 No, the primary outcome is assessed using a validated questionnaire 4.2 No, the measurement could not have differed between groups 4.3 Yes, assessors were aware of group assignment as it was self-report

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				• PFMT + ES: 0.67 ± 0.22 Follow up • PFMT: 0.61 ± 0.26 • PFMT + BF: 0.68 ± 0.30 • PFMT + ES: 0.80 ± 0.22 **ICIQ-UI score** Baseline • PFMT: 11.50 ± 5.61 • PFMT + BF: 14.23 ± 5.64 • PFMT + ES: 9.12 ± 4.49 Follow up • PFMT (n=17): 8.30 ± 6.40 • PFMT + BF (n=13): 12.62 ± 6.33 • PFMT + ES (n=15): 6.41 ± 5.83	4.4 Probably no, as all groups received an active intervention Low risk 5.1 No information, a protocol is published but this does not included an analysis plan 5.2 No information, an analysis plan is not published 5.3 No information, an analysis plan is not published Some concerns Overall rating: High risk of bias
Full citation Navarro-Brazalez, B., Prieto-Gomez, V., Prieto-Merino, D., Sanchez-Sanchez, B., McLean, L., Torres-Lacomba, M., Effectiveness of hypopressive exercises in women with pelvic floor	**Sample size** N=99 (including a third group that was not relevant to the protocol so was not included N=66 without this group) Number analysed (including baseline assessments) = PFMT group n=32;	**Interventions** **PFMT (n=33):** Through encouragement, feedback and resistance offered through vaginal palpation in the lithotomy position, participants performed PFM exercises based on components of the PERFECT scheme. At each session, participants were encouraged to achieve ten	**Details** Assessments took place at the end of the intervention (8 weeks); 3 months; 6 months and 12 months after the intervention end. Exercise adherence was evaluated by the physiotherapist, who	**Results** **PFDI-20 (mean, 95% CI; change score)** Post-intervention • PFMT: -30.55 (-40.70 to -20.39) • PFMT+HE: -24.41 (-34.72 to -14.09) 3 months • PFMT: -35.07 (-46.63 to -23.52)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, states that a computer randomisation scheme was used 1.2 Yes, states that allocation was not revealed until each participant had

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
dysfunction: a randomised controlled trial, Journal of clinical medicine, 9, 2020 **Ref Id** 1287106 **Country/ies where the study was carried out** Spain **Study type** RCT **Aim of the study** The aim of this study was to compare the effects of an eight-week hypopressive exercise program to those of an individualized pelvic floor muscle (PFM) training (PFMT) program, and to a combination of both immediately after treatment and at follow-up assessments at 3, 6 and 12 months later.	PFMT+HE group n=31 **Characteristics** Age (mean, SD), years: PFMT 48 (12); PFMT+HE 46 (8) BMI (mean, SD), kg/m2: PFMT 24.39 (4.77); PFMT+HE 26.21 (4.73) Pelvic floor dysfunction (n, %) • UI: PFMT 27 (84.4%); PFMT+HE 26 (83.9%) • AI: PFMT 13 (56.3%); PFMT+HE 9 (29.0%) • POP: PFMT 13 (40.6%); PFMT+HE 19 (61.3%) PFDI-20 (mean, SD): PFMT 71.71 (45.22); PFMT+HE 69.19 (51.62) POPDI (mean, SD): PFMT 18.49 (14.58);	maximal effort and rapid contractions lasting 1 s each, to maintain an isometric contraction up to 10 s, and to repeat this sequence ten times. Goals were adjusted according to participant progression at every session, and if the therapist considered it appropriate, manual resistance was applied to enhance PFM force. Internal palpation was performed using two fingers inside the vagina and feedback was given based on palpation at the midline, the left side and the right side, to teach women to train all of their PFMs. At any session, if a woman achieved a score < 3 on levator ani testing (LAT), intravaginal electrical stimulation (using biphasic pulses with frequency = 85 Hz, pulse width = 500 us and a train: rest period = 4:8, then using biphasic pulses with frequency = 30 Hz, pulse width = 500 us and a train: rest period of 15:10) was used for 15 min during the session to enhance PFM awareness and contraction. When pain was reported on palpation of the PFMs, local compression was applied to	asked participants at 6 and 12 months if they were doing their home exercises, and, if so, how many times per week. She also asked participants if they had incorporated the knack manoeuvre into their daily activities.	• PFMT+HE: -25.24 (-36.98 to -13.50) 6 months • PFMT: -39.49 (-49.86 to -29.11) • PFMT+HE: -24.71 (-35.25 to -14.17) 12 months • PFMT: -41.70 (-51.61 to -31.78) • PFMT+HE: -25.77 (-35.85 to -15.69) **POPDI (mean, 95% CI; change score)** Post-intervention • PFMT: -7.95 (-11.83 to -4.07) • PFMT+HE: -5.82 (-9.79 to -1.84) 3 months • PFMT: -8.24 (-12.84 to -3.63) • PFMT+HE: -4.75 (-9.46 to -0.03) 6 months • PFMT: -9.44 (-13.22 to -5.66) • PFMT+HE: -6.77 (-10.64 to -2.90) 12 months • PFMT: -13.11 (-16.94 to -9.29) • PFMT+HE: -6.10 (-10.02 to -2.18)	completed their baseline assessment 1.3 Yes, there were some significant differences between groups (e.g. number of participants with AI 56.3% vs 29%; POP 40.6% vs 61.3%; PFIQ-7 45.39 vs 35.48) Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 No information regarding deviations from the intended protocol 2.6 Probably no, an intent to treat analysis was performed, but 3 participants were not included in this 2.7 No, less than 5% were missing overall Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Study dates October 2013 to September 2017 **Source of funding** This research received no external funding.	PFMT+HE 22.45 (21.05) CRADI (mean, SD): PFMT 16.51 (18.26); PFMT+HE 14.22 (12.07) UDI (mean, SD): PFMT 36.72 (21.93); PFMT+HE 32.53 (25.22) PFIQ-7 V0 total (mean, SD): PFMT 45.39 (43.71); PFMT+HE 35.48 (28.57) POPIQ (mean, SD): PFMT 11.16 (16.96); PFMT+HE 9.37 (13.72) CRAIQ (mean SD): PFMT 11.31 (18.09); PFMT+HE 4.91 (8.65) UIQ (mean SD): PFMT 22.92 (19.52); PFMT+HE 21.20 (19.02) **Inclusion criteria** The inclusion criteria were self-reported signs or symptoms of stress or mixed UI,	painful points, and local stretching and eccentric PFM exercises were performed. Following these modalities, exercises were performed in the lithotomy position using a manometry probe, interfaced with an IBM compatible computer for biofeedback. The biofeedback system offered different screens to support concentric, isometric, and eccentric PFM exercises; the specific exercises and the timing were adjusted based on women's capacity and were progressed when appropriate. In women with low PFM contraction awareness (LAT < 3), and in women with large urogenital hiatus, the dynamometry probe, which could be opened to provide tactile feedback, was used instead of manometry. Women also progressed from manometry to dynamometry once they were capable of generating pressure while performing the exercises, as more resistance could be provided by opening the arms of the dynamometer. If women progressed		**CRADI (mean, 95% CI; change score)** Post-intervention • PFMT: -5.91 (-9.42 to -2.40) • PFMT+HE: -3.21 (-6.87 to 0.46) 3 months • PFMT: -7.54 (-11.58 to -3.49) • PFMT+HE: -5.50 (-9.73 to -1.28) 6 months • PFMT: -9.44 (-12.74 to -6.15) • PFMT+HE: -5.76 (-9.21 to -2.32) 12 months • PFMT: -8.17 (-11.66 to -4.67) • PFMT+HE: -4.21 (-7.86 to -0.56) **UDI (mean, 95% CI; change score)** Post-intervention • PFMT: -15.83 (-21.45 to -10.22) • PFMT+HE: -15.11 (-20.77 to -9.44) 3 months • PFMT: -21.06 (-26.44 to -15.69)	3.1 No, over 5% were lost to follow up in the PFMT+HE group 3.2 No, no evidence that the results were not biased by the missing data 3.3 No information, reasons for drop out are unclear 3.4 Probably no, the proportion of participants missing are the similar 3% vs 6% Some concerns 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an intervention Low risk 5.1 No information, a study protocol is reported but there is no analysis plan 5.2 Probably no, the study protocol lists outcomes which are reported in the paper

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	AI, and/or gynaecologist diagnosis of stage 1 or 2 of POP, according to the POP-Quantification Scheme **Exclusion criteria** The exclusion criteria were: age less than 18 years or over 70 years, pregnancy, pregnancy within the six months prior to referral, underwent physiotherapy for PFD in the previous year, abdominal or pelvic surgery in the previous year, only presenting with symptoms of urge UI, urge faecal incontinence or vaginal pain, concurrent neurological or a psychiatric disease, any medical contraindication to performing therapeutic exercises, not able to attend treatments or follow-up assessments at 3, 6 and 12 months, or the inability to	enough, the last two biofeedback sessions were conducted in a more functional standing position. After each treatment session, women were instructed to perform one to three sets of 5 to 10 repetitions PFM exercises daily at home, in supine, sitting or standing position, based on their PERFECT evaluation, daily, between 1 and 3 times per day. **PFMT + Hypopressive exercise (n=33):** Women performed both PFMT and hypopressive exercise. Participants learned how to perform the “hypopressive manoeuvre”, which consisted of exhaling to their expiratory reserve volume, then holding their breath (apnea), and expanding their rib cage, to draw their abdominal wall inward and cranially without inhalation. Women were asked to sustain the apnea and rib-cage expansion for approximately 10 s before resuming their normal breathing. When the participants were capable of performing this manoeuvre		• PFMT+HE: -14.62 (-20.04 to -9.20) 6 months • PFMT: -20.30 (-25.82 to -14.77) • PFMT+HE: -12.99 (-18.56 to -7.42) 12 months • PFMT: -20.57 (-25.29 to -15.84) • PFMT+HE: -15.77 (-20.54 to -11.01) **PFIQ-7 (mean, 95% CI; change score)** Post-intervention • PFMT: -21.49 (-30.60 to -12.38) • PFMT+HE: -14.78 (-23.93 to -5.64) 3 months • PFMT: -26.14 (-34.83 to -17.45) • PFMT+HE: -12.21 (-20.93 to -3.48) 6 months • PFMT:-26.6 (-33.46 to -19.74) • PFMT+HE: -18.50 (-25.39 to -11.62) 12 months • PFMT: -26.69 (-33.79 to -19.58) • PFMT+HE: -14.41 (-21.55 to -7.28)	5.3 No information Some concerns Overall judgement: Some concerns

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	understand and complete the study questionnaires	in supine, standing and sitting positions, they were then instructed on the series of “hypopressive postures”. These postures are described in standing, kneeling, four-point kneeling, sitting and supine positions, using a variety of upper and lower limb positions. While holding the hypopressive posture, the hypopressive manoeuvre was repeated three times, with a rest breath between repetitions; the entire sequence being referred to as a HE. Each HE was repeated three times with rest between exercises. Between 5 and 10 HEs were performed within each session based on the participant’s mastery of the exercises and readiness to progress through the 33 HEs described by Caufriez. The participants were consistently instructed during each exercise not to voluntarily contract their PFMs nor their abdominal muscles. After each intervention session, participants were asked to exercise at home, following the exercise prescriptions described for each group,		**POPIQ (mean, 95% CI; change score)** Post-intervention • PFMT: -5.57 (-9.86 to -1.27) • PFMT+HE: -2.96 (-7.30 to 1.38) 3 months • PFMT: -7.92 (-11.94 to -3.90) • PFMT+HE: -2.03 (-6.09 to 2.04) 6 months • PFMT: -7.30 (-10.15 to -4.45) • PFMT+HE: -4.03 (-6.91 to -1.15) 12 months • PFMT: -6.88 (-9.68 to -4.09) • PFMT+HE: -2.02 (-4.84 to 0.81) **CRAIQ (mean, 95% CI; change score)** Post-intervention • PFMT: -5.17 (-8.49 to 0-.86) • PFMT+HE: -3.05 (-6.39 to 0.30) 3 months • PFMT: -5.36 (-9.11 to -1.61)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
		alternating between PFMT and HE between days. All groups were given an educational strategy, which consisted of instruction, using printed materials and 3-dimensional anatomical models, on the anatomy of the pelvic floor and the physiology of the pelvic organs. Women were advised to minimize their risk factors by not gaining weight or smoking, limiting caffeine intake, optimizing nutritional intake to limit constipation, and avoiding weightlifting and other high impact sports. They were also instructed on proper toileting habits to avoid straining the pelvic floor and were taught to use the knack manoeuvre before and during tasks that increase intra-abdominal pressure A third group of hypopressive exercise alone was not extracted.		• PFMT+HE: -0.14 (-3.93 to 3.65) 6 months • PFMT: -5.65 (-7.78 to -3.53) • PFMT+HE: -2.53 (-4.68 to -0.38) 12 months • PFMT: -6.01 (-8.05 to -3.97) • PFMT+HE: -1.04 (-3.10 to 1.02) **UIQ (mean, 95% CI; change score)** Post-intervention • PFMT: -11.05 (-15.13 to -6.97) • PFMT+HE: -10.13 (-14.27 to -6.00) 3 months • PFMT: -13.45 (-17.19 to -9.70) • PFMT+HE: -11.18 (-14.97 to -7.39) 6 months • PFMT: -13.70 (-17.30 to -10.10) • PFMT+HE: -12.48 (-16.13 to -8.83) 12 months • PFMT: -13.40 (-17.61 to -9.19) • PFMT+HE: -10.55 (-14.81 to -6.28)	

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
				Adherence • PFMT: 23 (71.9%) • PFMT+HE: 21 (67.7%)	
Full citation Nyhus, M. O., Mathew, S., Salvesen, O., Salvesen, K. A., Stafne, S., Volloyhaug, I., Effect of preoperative pelvic floor muscle training on pelvic floor muscle contraction and symptomatic and anatomical pelvic organ prolapse after surgery: randomized controlled trial, Ultrasound in Obstetrics & GynecologyUltrasound Obstet Gynecol, 56, 28-36, 2020 **Ref Id** 1290350	**Sample size** N=159 (number analysed N=151) **Characteristics** Age (mean ± SD), years: PFMT group 60.1 ± 11.2; Control group 60.6 ± 10.9 Parity (mean ± SD): PFMT group 2.3 ± 0.8; Control group 2.6 ± 0.9 Body mass index (kg/m2) (mean ± SD): PFMT group 26.3 ± 4.4 25.7 ± 4.1 **Inclusion criteria**	**Interventions** **PFMT (n=75):** The intervention consisted of intensive PFMT in the period between inclusion and surgery. Women in the intervention group received an information leaflet and were encouraged to perform daily PFMT consisting of 8–12 contractions, each held for 6–8 s, three times a day. They received information on prevention and treatment of obstipation and proper emptying of the bladder and bowel. They were also instructed to perform PFM contraction in situations leading to increased intra-abdominal pressure (sneezing, lifting, coughing) and to avoid straining when defecating. Each woman in the intervention group had personal visits with a dedicated pelvic floor	**Details** All women were asked to answer 'yes' or 'no' to the question of whether they experienced a sensation of a bulge in the vagina. Women who responded 'yes' were asked to mark the degree of bother on a VAS ranging from 0 to 100 mm. A positive response at the post-operative visit was registered as symptomatic recurrence of POP	**Results** **Sensation of vaginal bulge (mean, 95% CI)** Day of surgery • PFMT group (n=72): 55.3 (49.0–61.5) • Control group (n=75): 56.5 (50.4–62.7) Post operative follow up • PFMT group (n=73): 7.4 • (3.5–11.3) • Control group (n=75): • 6.0 (2.1–9.8) **Improvement in POP symptoms as assessed by participant assessment of sensation of vaginal bulge (n, %)** • PFMT: 62/69 (89.9) • Control: 68/72 (94.4)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, web based randomisation was used 1.2 No information, allocation concealment was not discussed 1.3 No, no significant differences between groups in terms of baseline characteristics Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Norway **Study type** RCT **Aim of the study** To evaluate the effect of preoperative PFMT on PFM contraction, POP symptoms and anatomical POP 6 months after prolapse surgery, and to assess the overall changes in POP symptoms, pelvic organ descent and PFM contraction after surgery **Study dates** Not reported **Source of funding** This research was funded by the Liaison Committee, Helse-	Eligibility criteria were indication for POP surgery, defined as symptomatic POP Stage 2 or higher, age over 18 years, ability to provide consent and understanding of Norwegian or English language. Patients were included regardless of whether they had primary or recurrent POP **Exclusion criteria** Women with cognitive impairment were excluded	physiotherapist after 2 and 6 weeks, during which proper contraction of the PFM was assessed by vaginal palpation. Women were offered optional weekly PFMT in groups with the dedicated physiotherapist. **Control (n=76):** Women in the control group received no intervention during the wait for surgery. Post menopausal women in both groups started local oestrogen therapy if there was no contraindication (e.g. ongoing treatment with aromatase inhibitor for breast cancer)		**Recurrence of POP symptoms (participant assessment of sensation of vaginal bulge; n, %)** • PFMT: 13/71 (18.3) • Control: 16/73 (21.9)	2.3 Probably no, no information regarding deviations from the intended protocol, there was some non-adherence but this is unlikely due to the trial context 2.6 Yes, an intent to treat analysis was performed Some concerns 3.1 No, over 5% did not attend follow up 3.2 No, no evidence that the results were not biased by the missing data 3.3 Probably not, the proportion lost to follow up are similar between the groups (10% vs 3.8%) Low risk 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably yes, as the control group did not receive an intervention so may

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Midt (Samarbeidsorganet).					not expect any improvement 4.5 Probably yes High risk 5.1 No information, states that the study was registered but this information cannot be accessed, therefore no information on whether there is a protocol with pre-specified analysis plan 5.2 No information 5.3 No information Some concerns Overall judgement: High risk
Full citation Okayama, H., Ninomiya, S., Naito, K., Endo, Y., Morikawa, S., Effects of wearing supportive underwear versus pelvic floor muscle training or no treatment in women with symptoms of stress urinary incontinence: an assessor-blinded randomized control trial, International urogynecology	**Sample size** N=150 (including one group that did not match the protocol criteria and was not included, without this group N=100) **Characteristics** Median age (IQR, years): PFMT 45 (39-50); control 43.5 (38.3-50)	**Interventions** PFMT (n=50): No treatment (n=50): No intervention was administered to the no treatment group during the 12-week intervention period. A third group (n=50) was included but not extracted as it did not meet the protocol	**Details** The participants in the PFMT group were instructed to perform the PFMT according to a training CD with music, "3 min exercise before going out" (Takumi Vision Co., Kyoto, Japan), at home twice per day during the 12-week intervention period. This training CD was made in Japan for	**Results** **Improvement or cure** • PFMT (n=31): 23 (74.2) • Control (n=28): 7 (25) **Cure only** • PFMT (n=31): 17 (54.8) • Control (n=28): 5 (17.9) **UI episodes/week:** median (IQR)	**Limitations** Limitations Cochrane risk of bias (Version 2.0) Domain 1: Randomisation: Some concerns 1.1: Yes, participants were randomly allocated to treatments using

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
journal, 30, 1093-1099, 2019 **Ref Id** 1196703 **Country/ies where the study was carried out** Japan **Study type** RCT **Aim of the study** To determine the effects of wearing a shaper compared with PFMT at home using a training compact disc (CD) with music, or no treatment, in an assessor-blinded randomized control trial, on reducing UI symptoms. **Study dates** February to May 2012	BMI (IQR, years): PFMT 20.1 (19.2-22); control 21 (19.8-23.8) Type of UI (n, %): PFMT: SUI 19 (61.3), MUI 12 (38.7); control SUI 18 (64.3), MUI 10 (35.7) **Inclusion criteria** Parous women aged 30-59 years who experienced SUI symptoms at least once per week (defined using the Japanese version of the Incontinence Questionnaire-Short Form (ICIQ-SF)). In addition, women with mixed urinary incontinence (MUI) were also included because the shaper was effective in reducing UI symptoms among women with MUI in the previous pilot study **Exclusion criteria** The exclusion criteria were current	(participants wore shaper supportive underwear)	home practice of the PFMT with reference to a previous study. This training CD includes three versions of the song for use in the morning, daytime, and evening. Each song with rhythm and narration encourages the listener to perform voluntary pelvic floor muscle contractions for 26 times per 3 min. One training CD was sent to each participant in the PFMT group No intervention was administered to the no treatment group during the 12-week intervention period. A third group (n=50) was included but not extracted as it did not meet the protocol (participants wore shaper supportive	• 12th week PFMT 0.0(0.0-2.0) Control 1.5(1.0-3.0) **ICIQ-SF (IQR) score at 12th week** • 12th week PFMT 5.0(1.0-7.0) Control 6.0(4.3-10.0)	computer generated random assignment 1.2: No information, method of allocation concealment not reported 1.3: No, no significant differences between groups at baseline Domain 2: Deviations from intended interventions: Some concerns 2.1: Yes, participants not blinded 2.2: Yes, carers and people delivering the interventions not blinded, although outcome assessors were blinded to group assignment until analysis 2.3: No information whether there were any deviations from the intended intervention

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Source of funding Not reported	pregnancy, delivery within 3 months, previous and/or current treatments for UI, and waist size out of the specified range (waist measurement approximately 58–82 cm) for wearing the shaper.		underwear – see evidence review [N])		Domain 3: Missing outcome data: High risk 3.1: Probably yes, 38% in PFMT group and 44% in control group dropped out 3.2: Probably no, no evidence that the results were not biased by missing outcome data 3.3: Probably no, missingness of the outcome was not dependent on its true value Domain 4: Measurement of the outcome: Some concerns 4.1: Probably no, outcomes clearly defined, but some information on how they were assessed and by whom 4.2: Probably no, outcomes unlikely to

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					differ between treatment arms 4.3: Probably yes, outcomes were self-report and participants were not blinded 4.4: Probably yes, no treatment group may not expect to see change in quality of life/symptom measures which may influence reporting 4.5: Probably no, no reason to suggest assessment was influenced by not being blinded Domain 5: Selection of the reported result: Some concerns 5.1: No, no pre-panned analysis or protocol available 5.2: No, descriptive data presented 5.3: No, data presented as expected

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
					Domain 6: Overall judgment of bias: High concerns
Full citation Ptak, M., Ciecwiez, S., Brodowska, A., Szylinska, A., Starczewski, A., Rotter, I., The Effect of Selected Exercise Programs on the Quality of Life in Women with Grade 1 Stress Urinary Incontinence and Its Relationship with Various Body Mass Indices: A Randomized Trial, BioMed Research International, 2020, 1205281, 2020 **Ref Id** 1290351 **Country/ies where the study was carried out** Poland **Study type** RCT	**Sample size** N=150 **Characteristics** Mean age (SD), years: Combination group 53.1±5:5; PFMT alone group 53.0±5:7 BMI (%) • Group 0 ≥ 30 kg/m2: combination group 26.0%; PFMT alone group 25.0% • Group 1 < 30 kg/m2: combination group 74.0%; PFMT alone group 75.0% **Inclusion criteria** The inclusion criteria of the study were age 45–60, grade 1 SUI confirmed with *a cough test in a urodynamic study and in a gynaecological examination*, lack of urge incontinence, lack of any genitourinary surgeries or other	**Interventions** **PFMT + abdominal exercises (n=75):** pelvic floor muscle (PFM) exercises with a cocontraction of the transverse abdominal muscle (TrA), performed four times per week for a period of three months. Each session included three series of PFM exercises with 10 repetitions, with 60-70% of a maximal voluntary contraction (MVC) lasting for 6-8 seconds, followed by two series with 10 repetitions, with 30-60% of a MVC lasting for 1-2 seconds. The patients were asked to contract their PFMs while breathing out and to perform the Knack maneuver whenever they felt an urge to cough, sneeze, or laugh. The patients practiced together, in groups, under the direction of a qualified physiotherapist. **PFMT alone (n=75):** The training program for the PFMT alone group was essentially the same,	**Details** The primary outcome was the Polish version of the International Consultation on Incontinence Modular Questionnaire–Lower Urinary Tract Symptoms–Quality of Life (ICIQ LUTS QOL). The survey consisted of 19 questions, each scored on a 4-item scale, from 1 to 4, where “1” meant nothing at all, “2” little, “3” moderately, and “4” very much. Hence, the overall score could have ranged from 19 to 76. The raw scores were transformed according to Hebbar based on the King’s Health Questionnaire, a slightly older, extensive questionnaire for a QOL research.	**Results** **ICIQ LUTS QOL - overall (3 months)** • PFMT + abdominal exercises (n=70): 114.9 (85.9) • PFMT alone (n=70): 217.75 (90.9)	**Limitations** Cochrane risk of bias tool (version 2) 1.1 No information, just states that they were randomly assigned 1.2 No information, allocation concealment was not discussed 1.3 No, no significant differences between groups in terms of baseline characteristics, but baseline QoL is not reported Some concerns 2.1 Yes, participants were aware of their assigned intervention 2.2. Yes, people delivering the intervention and research staff were aware of participant assignment 2.3 No information regarding deviations from the intended protocol 2.6 Probably no, an intent to treat analysis

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Aim of the study To analyse the influence gymnastics has on the quality of life (QOL) in women with grade 1 stress urinary incontinence **Study dates** **Source of funding**	illnesses (for example, hypertension, diabetes), *lack of oestrogen-dependent neoplasm or breast cancer and lack of pelvic organ prolapse* (*stage 0 in Pelvic Organ Prolapse Quantification*) *in a gynaecological examination* in medical histories, and a written informed consent to participate in the study **Exclusion criteria** Women younger than 45 and older than 60, with grades of SUI other than grade 1, with pelvic organ prolapse (*higher than stage 0 in Pelvic Organ Prolapse Quantification*), *with estrogen-dependent neoplasm and breast cancer*, after genitourinary surgeries, or those who had been prescribed any kind of medicine permanently, were excluded from the study, along with the	however, without the cocontraction of the TrA. Both groups were prescribed vaginal estrogens (estriol suppositories, 0.5 mg, twice a week).	A per protocol analysis method was used, excluding those who dropped out.		was performed, but 5 participants from each group were not included in this 2.7 Yes, more than 5% were missing in each group High risk 3.1 No, over 5% were lost to follow up 3.2 No, no evidence that the results were not biased by the missing data 3.3 No information, reasons for drop out are unclear (i.e. just states 'resigned') 3.4 Probably no, the proportion of participants missing is the same Some concerns 4.1 No, a validated method was used 4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably no, as both groups received an intervention Low risk

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	patients who had not expressed their written informed consent to participate				5.1 No information, no study protocol 5.2 No information 5.3 No information Some concerns Overall judgement: High risk
Full citation Teixeira Alve, A., Azevedo Garcia, P., Henriques Jacomo, R., Batista de Sousa, J., Borges Gullo Ramos Pereira, L., Barbaresco Gomide Mateus, L., Gomes de Oliveira Karnikoskwi, M., Effectiveness of transcutaneous tibial nerve stimulation at two different thresholds for overactive bladder symptoms in older women: a randomized controlled clinical trial, Maturitas, 135, 40-46, 2020 **Ref Id** 1232485	**Sample size** N=101 **Characteristics** Baseline characteristics were assessed excluding those who were lost to follow up (Group 1 n=33; group 2 n=30; group 3 n=25) Age (mean, SD), years: Group 1 67.52 (6.17); group 2 69.57 (6.36); control group 69.48 (7.83) BMI (kg/m2) (mean, SD): group 1 28.27 (4.47); group 2 28.86 (4.79); control group 27.72 (3.77) MUI (%): group 1 75.8; group 2 83.3; control groupICIQ-OAB 84.0	**Interventions** **TTNS sensitivity threshold (n=39) and TTNS motor threshold (n=33):** Patients allocated to groups 1 and 2 performed 8 sessions of TTNS for 30 min, twice a week. The intervention comprised an 8-session TTNS treatment program, each 30-minute treatment session performed twice weekly for a continuous period of four weeks. Two silicone surface electrodes measuring 5 × 3 cm were positioned according to the protocol of Amarenco et al.. The patients were positioned with the right leg extended and supported on a chair and the electrotherapy was always done on the right leg. An electrode was fixed and positioned 10 cm above the medial malleolus, medial to the tibia, and the other electrode was movable and positioned posterior to the	**Details** The symptoms of overactive bladder were evaluated by the ICIQ-OAB questionnaire, 0–16 overall score with greater values indicating increased symptom severity. Adherence is not defined.	**Results** **ICIQ-OAB** Baseline • Group 1: 8.39 (3.36) • Group 2: 8.70 (2.73) • Control group: 8.80 (3.25) Post-intervention • Group 1: 3.48 (2.45) • Group 2: 3.90 (2.82) • Control group: 8.60 (3.24) **Adherence** • Group 1: 84.61 % • Group 2: 90.90 % • Control group: 86.20%	**Limitations** Cochrane risk of bias tool (version 2) 1.1 Yes, online randomisation was used 1.2 Probably yes, states that investigators were blind to group allocation during the experiment and analysis 1.3 No, no significant differences between groups in terms of baseline characteristics Low risk 2.1 Yes, participants were aware of their assigned intervention, although were not told what other groups received 2.2. Yes, people delivering the

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
Country/ies where the study was carried out Brazil **Study type** RCT **Aim of the study** To compare the effectiveness of TTNS at two different current amplitude thresholds (sensory and motor) in overactive bladder symptoms in older women **Study dates** Between October 2013 and August 2014 **Source of funding** No funding	**Inclusion criteria** The priori inclusion criteria were female, age 60 years or older, and probable lower urinary tract dysfunction. Urinary tract dysfunction was exclusively investigated by the OAB-V8 (Overactive Bladder version 8) questionnaire **Exclusion criteria** The priori exclusion criteria were: urinary tract infection (identified by urine examination), history of OAB treatment and hormone replacement therapy in the last six months, previous surgery to treat urinary incontinence, basic neurological diseases (multiple sclerosis, Alzheimer's disease, Stoke and Parkinson disease), history of genitalurinary neoplasia, complaint of pain in the lower	medial malleolus, and could follow the path of the tibial nerve. The correct position of the electrodes was determined by the visualization of rhythmic flexions of the toes during stimulation with frequency of 1 Hz and pulse width of 200 μs. After fixation of the electrode, the intensity was decreased and the stimulation frequency was increased to 10 Hz. The amplitude of the current remained in the sensory limb throughout the session for group 1 (tingling sensation, but without any flexion of the toes, including hallux) and was maintained at the motor threshold in group 2 (visualization of flexion of the hallux, extend to the other toes, throughout the session). Physiotherapists were instructed to increase intensity whenever they observed that the movement of the toes had diminished or ceased. For the sensitivity threshold, the increase in intensity occurred sometimes because of current accommodation, but not enough to generate any movement in the hallux and / or other toes. The re-			intervention were aware of participant assignment 2.3 Probably not, no information regarding deviations from the intended protocol, apart from adherence which was reasonably high in the 3 groups (84%, 91% 86%) 2.6 Probably not, a per protocol analysis was used, excluding participants who were lost to follow up 2.7 Probably yes, greater than 5% were not included in analyses High risk 3.1 No, over 5% were missing due to being lost to follow up 3.2 No, no evidence that the results were not biased by the missing data 3.3 Probably not, the proportion lost to follow up are similar between the groups Low risk 4.1 No, a validated questionnaire was used

Study details	Participants	Interventions	Methods	Outcomes and Results	Comments
	belly during urination for more than six months, previous pelvic irradiation, use of cardiac pacemaker, metallic implants in the foot and ankle region right, inability to respond to questionnaires adequately and / or properly fill the bladder diary and genital prolapse above third degree Baden and Walker.	evaluation of the 2 groups occurred 5 weeks after the initial evaluation with the same evaluator **Control group (n=29):** No intervention, participants were reassessed 5 weeks after the initial evaluation			4.2 No, measurement could not have differed between groups 4.3 Yes, as a self report measure was used 4.4 Probably yes, as the control group did not get an intervention and so may not expect any improvement 4.5 Probably yes. High risk 5.1 Probably no, there is a published protocol, however this does not have details regarding the intentions for analysis 5.2 Yes, protocol states that the OAB-V8 will be a primary outcome, but this is not included in the paper. The protocol also says that anxiety and depression will be assessed, but these are not reported 5.3 No information High risk Overall judgement: High risk of bias

CRADI: Colorectal-Anal Distress Inventory; CRAIQ: Colo-Rectal-Anal Impact Questionnaire; EQ5D: EuroQOL 5 dimension quality of life scale ; FIQL: faecal incontinence related quality of life scale; ICIQ-UI SF: International Consultation on Incontinence Questionnaire-Urinary Incontinence Short Form; ICIQ: International Consultation on Incontinence Questionnaire-Urinary Incontinence; ICIQ-LUTSqol: International Consultation on Incontinence Questionnaire Lower Urinary Tract Symptoms Quality of Life

Module; IIQ-7: Incontinence Impact Questionnaire; I-QOL: incontinence related quality of life; ISI: incontinence severity score; KHQ: Kings Health Questionnaire; OABSS: Overactive Bladder Symptom Score; PFDI: pelvic floor distress inventory; PFIQ-7: Pelvic Floor Impact Questionnaire; PFM: pelvic floor muscle; PFMT: pelvic floor muscle training; PGI-I: Patient Global Impression of Improvement; PISQ: Prolapse and Incontinence Sexual function Questionnaire; POP: pelvic organ prolapse; POPDI: Pelvic Organ Prolapse Distress Inventory; PTNS: percutaneous posterior tibial nerve stimulation; QUID: Questionnaire for Urinary Incontinence Diagnosis; SUI: stress urinary incontinence; TTNS: transcutaneous tibial nerve stimulation; UDI-6: Urinary Distress Inventory; UI: urinary incontinence