

### **Continence**

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### **July 2025**

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1. Home and outpatient electrostimulation in the treatment of urinary incontinence in women: a systematic review.

Authors: Caetano S.M.O.C.; Pereira E.G.; Ribeiro A.M.; Brito J.B. and dos Santos, C. P. C.

**Publication Date: 2025** 

Journal: BMC Women's Health

**Abstract:** Introduction and hypothesis: Urinary incontinence (UI) is defined as any involuntary loss of urine and can be associated with urgency and/or physical exertion. Electrical stimulation (ES) has recently been identified as a proven therapeutic alternative for UI, with few side effects and low cost. This systematic review, registered on the Prospective Register of Systematic Reviews (RD42024528812), investigated whether home-based ES would be as viable as outpatient ES in the treatment of women with UI.

Method(s): Study selection was conducted by two independent researchers across the following databases: Cochrane Central Register of Controlled Trials (CENTRAL), PubMed, Embase, Web of Science, Scopus, and PEDro (search conducted on February 25, 2024). We also searched the reference lists of eligible articles. There were no restrictions on date and language. The RoB2 and GRADE tools were used to assess methodological quality and evidence recommendation.

Result(s): 723 articles were found, and four trials were eligible. Very low-quality evidence indicated statistically significant differences in cure rates or improvement of urinary symptoms in women treated with both outpatient and home-based ES. Low-quality evidence recommends home-based ES in maintaining improvement of urinary symptoms, and moderate-quality evidence indicates no severity of symptoms in the home-based group.

Conclusion(s): Home-based ES is shown to be as effective as outpatient ES in the treatment of UI in women. However, data analysis revealed low-quality evidence regarding the cure or improvement of the women's conditions.

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#### 2. Structural analysis of women's social representations of urinary incontinence

**Authors:** Coelho, Manuela de Mendonça Figueirêdo; Mesquita, Amanda Holanda de; de Oliveira, Beatriz Alves; Martins, Camila Barroso; Cabral, Riksberg Leite; Oriá, Mônica, Oliveira Batista; Martins, Mariana Cavalcante; Coutinho, Janaína Fonseca Victor and Gubert, Fabiane do Amaral

**Publication Date: 2025** 

Journal: Revista Da Escola De Enfermagem Da U S

Abstract: Objective: To assess the structure of social representations of urinary incontinence among Brazilian women.; Method: A cross-sectional study, which used semi-structured questionnaires applied online between September 2021 and June 2022. A total of 796 Brazilian women participated. Lexical and similarity analyses were performed using the EVOC 2000® and IRAMUTEQ® software. Evoked words were organized based on frequency and evocation hierarchy.; Results: The analyses indicated that the words "urine", "embarrassment", "pee", "discomfort", "pain", "discomfort", "urine leakage", "infection", "bladder", "burning", "leakage", "fear", "wet", "problem" and "disease" were at the core of social representations about urinary incontinence. These terms were frequently mentioned and appeared primarily in the responses. In addition to the physical impact, urinary incontinence was associated with social isolation, anxiety and negative effects on sexual health.; Conclusion: Urinary incontinence affects several aspects of women's lives, imposing negative representations in both physical and emotional dimensions. This study highlighted the urgency of destigmatizing the condition and promoting more comprehensive care approaches that consider the complexities of these social representations.

### 3. Impact of Social Determinants of Health on Fecal Incontinence Treatment In Older Women

**Authors:** Halani, Priyanka Kadam; Wilson, Lauren; Cadish, Lauren A.; Routh, Jonathan C. and Anger, Jennifer

**Publication Date: 2025** 

**Journal:** American Journal of Obstetrics and Gynecology

**Abstract:** Objective: Many women with fecal incontinence (FI) do not seek care despite the availability of effective treatments. Factors influencing care-seeking for FI are not well elucidated, and the role of social determinants of health (SDOHs) in FI treatment utilization is unknown. Our primary aim was to determine the association between SDOHs and treatment

utilization among Medicare beneficiaries with FI. We secondarily aimed to determine the baseline treatment utilization rate and to determine factors associated with FI treatment utilization.; Study Design: We conducted a retrospective cohort study of Medicare beneficiaries with FI based on 2010-2018 claims data from a 5% national sample. Women with FI were identified by diagnosis codes, and those receiving treatment were identified by Current Procedural Terminology codes for pelvic floor physical therapy with biofeedback, sacral neuromodulation, anal sphincteroplasty, percutaneous tibial nerve stimulation, and anal procedures. Comorbidity was assessed via the Charlson comorbidity index. SDOHs were defined by the Social Vulnerability Index (SVI), a census-based score accounting for factors such as socioeconomic status, disability, ethnicity, language, housing type, and transportation by county. SVI is reported as a percentile rank, with higher percentiles reflecting greater vulnerability. Additional SDOH variables analyzed included Medicaid dual eligibility status, per capita income, and proportion of the population below poverty level. The association between SDOHs and treatment for FI was evaluated using Cox proportional hazards models.; Results: We identified 33,010 women with a diagnosis of FI, of whom 3,160 (9.6%) underwent treatment. Treatment modalities included anal procedures (6.5%), sacral neuromodulation (2.4%), percutaneous tibial nerve stimulation (0.9%), anal sphincteroplasty (0.4%), and pelvic floor physical therapy with biofeedback (0.1%). Those who did not undergo treatment were older, more commonly Medicaid dual eligible, had lower per capita incomes, higher poverty rates, and higher Charlson comorbidity index scores (all p<0.01, Table 1). Higher SVI scores (HR 0.88, 95% CI 0.79-0.97), Medicaid dual eligibility (HR 0.45, 95% CI 0.39-0.52), and residence in high poverty counties (HR 0.82, 95% CI 0.74-0.9) were associated with lower likelihood of treatment, whereas higher income was associated with greater likelihood of treatment (HR 1.44, 95% CI 1.3-1.59). The association between treatment and Medicaid dual eligibility (HR 0.91, 95% CI 0.82-1.01), income (HR 1.41, 95% CI 1.27-1.56), and poverty rate (HR 0.86, 95% CI 0.78-0.95) persisted after accounting for patient characteristics; the association between SVI and treatment did not. Increasing age (HR 0.96, 95% CI 0.96-0.97), Black race (HR 0.82, 95% CI 0.7-0.97), higher Charlson comorbidity index (HR 0.65, 95% CI 0.06-0.70), depression (HR 0.66, 95% CI 0.53-0.81), immobility (HR 0.36, 95% CI 0.22-0.61), and loose stools (HR 0.87, 95% CI 0.79-0.94) were associated with lower treatment receipt, whereas urinary incontinence (HR 1.71, 95% CI 1.57-1.85) and constipation (HR 1.29, 95% CI 1.19-1.40) were associated with higher likelihood of treatment.; Conclusions: Treatment utilization among women with FI is low even within an insured population. In addition to comorbid conditions, social factors reflecting social disadvantage are associated with lower treatment utilization. Future efforts to increase treatment utilization should target this vulnerable group of women. (Copyright © 2025. Published by Elsevier Inc.)

## 4. Nursing-centered development of an Al-based decision support system in pressure ulcer and incontinence-associated dermatitis management - a mixed methods study

**Authors:** Majjouti, Khalid; Priester, Vanessa; Tapp-Herrenbrueck, Michaela; Brehmer, Alexander; Pinnekamp, Hannah; Aleithe, Michael; Fischer, Uli; Kleesiek, Jens and Hosters, Bernadette

**Publication Date: 2025** 

Journal: BMC Nursing

Abstract: Background: Differentiating between stage 1 or 2 pressure ulcer/pressure injury (PU/PI) and incontinence-associated dermatitis (IAD) poses a significant challenge for healthcare professionals, due to their visual similarity. Incorrect assessments may trigger inappropriate interventions, potentially resulting in delayed treatment. KIADEKU is a multicenter research project aimed at supporting the assessment and documentation of PU/PI and IAD, as well as the implementation of evidence-based care through an Al-based application in nursing care. This paper investigates how to integrate evidence from nursing science and clinical practice into the development of the proposed Al system. Methods: We conducted a literature review of nursing criteria for wound assessment. Nursing experts iteratively evaluated the findings, leading to the definition of a Minimum Data Set (MDS) that the research team used to annotate wound images for Al training. We collected a data set of wound images from the medical records of two university hospitals. To ensure high data quality, we implemented a validation process involving up to four independent expert assessments of each wound image. We calculated Krippendorff's alpha to assess the internal consistency of the annotation process for reliability analysis. This study adhered to the TRIPOD-Al guidelines. Results: The differentiation between PU/PI and IAD primarily relies on clinical observation and visual inspection, with key factors including aetiology, anatomical location, and wound morphology. The validated MDS encompasses 18 wound-related and four aetiological categories, including visual and contextual patient data. The Al system consequently integrates wound images with categorical patient information. The reliability analysis of 1,521 annotated wound images indicates substantial agreement for wound type classification ( $\alpha$  = 0.64, 95% CI 0.62–0.68) and fair to moderate agreement for PU/PI ( $\alpha$  = 0.57, 95% CI 0.55-0.63) and IAD categorization ( $\alpha = 0.27$ , 95% CI 0.20-0.36). Conclusions: The integration of evidence from nursing science and practice into the AI development process using a mixed-methods approach, established a robust, evidence-based foundation. This approach yielded an innovative implementation of routine care data for AI training, advancing the field of Al-driven wound care solutions. Trial registration: Registered with the German Clinical Trials Register (DRKS) on 2023-09-05. DRKS-ID: DRKS00029961.

#### 5. Prevalence, Diagnosis, and Management of Stress Urinary Incontinence in Women: A Collaborative Review.

Authors: Moris L.; Heesakkers J.; Nitti V.; O'Connell H.E.; Peyronnet B.; Serati M.; Omar M.I. and Harding, C.

**Publication Date: 2025** 

Journal: European Urology

**Abstract:** Background and objective: Stress urinary incontinence (SUI), defined as any involuntary leakage of urine associated with physical activity, remains underdiagnosed and undertreated. This review aims to provide an updated overview of the prevalence, diagnosis, and treatment of SUI in women, drawing upon recent evidence-based literature and clinical auidelines.

Method(s): A systematic search of the MEDLINE database was conducted to identify only the most up-to-date and relevant studies published up to February 26, 2024, including the reference ESTER systematic review. The search was limited to systematic reviews published in the preceding 1 yr. Any additional included publications were limited to those published or referenced as part of the existing/current guidelines. Key findings and limitations: Diagnosis of SUI involves a comprehensive assessment, including medical history, physical examination, and in some cases, invasive urodynamics. Pelvic floor muscle training emerges as a first-line management strategy, showing efficacy in symptom improvement when good educational instructions and supervision are provided. Surgical interventions with midurethral and singleincision slings offer a second-line option, although concerns regarding mesh-related complications persist with a decrease in its use. Moreover, the long-term efficacy of singleincision slings remains to be confirmed. Urethral bulking agents, colposuspension, and autologous fascial slings are existing alternatives supported by robust evidence, albeit with a different adverse event profile. Management of complicated and severe SUI remains challenging, with autologous fascial sling and artificial urinary sphincters being established treatments, but high-quality data remain lacking. Conclusions and clinical implications: Heightened awareness and accessibility to SUI treatment are imperative to address the gap between prevalence and medical care-seeking behavior. Pelvic floor muscle training and surgical interventions represent key modalities. However, a notable escalation in invasiveness and complication rates when transitioning to surgical interventions is clear and has resulted in a hesitance among patients to proceed along the treatment continuum, particularly in light of mesh-related complications. Ongoing research is necessary to optimize outcomes and ensure patient safety, particularly for complicated SUI where data on comparative effectiveness remain limited.

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# 6. Controlled Pilot Intervention Study on the Effects of an Al-Based Application to Support Incontinence-Associated Dermatitis and Pressure Injury Assessment, Nursing Care and Documentation: Study Protocol

**Authors:** Pinnekamp, Hannah;Rentschler, Vanessa;Majjouti, Khalid;Brehmer, Alexander;Tapp-Herrenbrück, Michaela;Aleithe, Michael;Kleesiek, Jens;Hosters, Bernadette and Fischer, Uli

**Publication Date: 2025** 

Journal: Research in Nursing & Health

**Abstract:** Artificial Intelligence (AI)-based applications have significant potential to differentiate between pressure injuries (PI) and incontinence-associated dermatitis (IAD), common challenges in nursing practice. Within the KIADEKU overall project, we are developing an Albased application to aid in the nursing care of PI and IAD and to facilitate personalized, evidence-based nursing interventions. The KIADEKU clinical sub-study described in this study protocol is a controlled, non-randomized clinical pilot intervention study investigating the effects of the Al-based application, fully developed in the KIADEKU overall project, on the duration of wound assessment, dressing change and documentation, guideline adherence, and nurse task load. The study utilizes a pre-post design with two data collection periods. During the initial phase, we will observe and survey nurses in the control group as they provide conventional wound care without AI support to adult patients with PI or IAD in the pelvic area across eight wards at the LMU University Hospital. In the following intervention phase, the Albased application will assist nurses in wound assessment and deliver guideline-based nursing interventions for documented wound types. Observations and surveys will be repeated. Measurements will include the duration of wound assessment, dressing changes, and documentation, adherence to wound care guidelines, and the accuracy of AI predictions in clinical settings, validated by an on-site expert assessment. The survey will assess nurses' task load and other covariates, such as professional experience, overall workload during the shift, and wound severity. Linear regression models will be used to analyze the effects of Al usage on the aforementioned aspects, taking into account these covariates. The accuracy of Al predictions regarding wound type and classification will be measured using the on-site expert's assessment as the ground truth. The usability of the Al-based application and standard clinical documentation systems will be evaluated further. The deployment of the Al application in clinical settings aims to reduce the duration of wound assessments, dressing changes, and documentation; decrease nurse task load; enhance guideline adherence in wound care; and promote AI utilization in nursing. German Clinical Trials Register (DRKS) (DRKS00031355). Registered on April 5th, 2023. TRIAL REGISTRATION: German Clinical Trials Register (DRKS) DRKS00031355. Registered on April 5 th 2023. PATIENT OR PUBLIC CONTRIBUTION: Patient representatives contributed to the development of the Al-based application through the use of Delphi methodology, as part of the KIADEKU qualitative substudy. (© 2025 The Author(s). Research in Nursing & Health published by Wiley Periodicals LLC.)

#### 7. Urinary incontinence severity: the impact on workplace productivity

**Authors:** Porto, Marta G.;Marôco, João;Mascarenhas, Teresa;Vergamota, Patrícia;Queiroz-Garcia, In and Pimenta, Filipa

**Publication Date: 2025** 

Journal: World Journal of Urology

Abstract: Competing Interests: Declarations. Conflict of interest: The authors declare no competing interests. Ethical approval: The studies involving humans were approved by Ispa – Instituto Universitário Ethics Committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.; Purpose: Urinary Incontinence (UI) is a highly prevalent yet underreported condition among middle-aged women, with its symptom severity significantly impacting Workplace Productivity (WP). This study aimed to explore the impact of UI symptom severity on the WP of middle-aged women and to investigate the proportion of women who refrain from seeking medical treatment.; Methods: A cross-sectional study was conducted with 1,214 Portuguese women aged 40-65 (M age =49.97; SD age =6.737), actively employed and self-reporting occasional/frequent urine loss. All data analyses were done with IBM SPSS Statistics and IBM SPSS AMOS. Structural equation modeling (SEM) was performed to analyze associations while adjusting for confounders such as age, education, menopausal status, BMI, and perceived sleep quality.; Results: The predictive model showed an acceptable fit (CFI = 0.921; TLI = 0.850; RMSEA = 0.076; SRMR = 0.049). Higher UI symptom severity significantly predicted greater WP impairment ( $\beta = 0.440$ ; p < .001). Age ( $\beta = -0.107$ ; p = .002) and education ( $\beta$ = -0.061; p =.020) were associated with a lower impact of UI on WP, while poor sleep quality was associated with greater WP impairment ( $\beta$  = 0.121; p = .006). Notably, 60% of participants experiencing had not contacted a doctor regarding their symptoms, and 72.7% had never undergone treatment for UI.; Conclusion: UI symptom severity negatively impacts WP, yet most affected women do not seek treatment. More effective workplace-based online interventions and accessible UI management strategies are essential to mitigating these effects. Future research should also incorporate objective clinical assessments and explore interventions tailored to different UI subtypes. (© 2025. The Author(s).)

# 8. What do physiotherapists do in managing urinary incontinence in women in primary health care? a scoping review protocol

**Authors:** Santos, Giovanna Campos;Souza, Amanda Damasceno de and Santos, Mara Lisiane de Moraes dos

**Publication Date: 2025** 

Journal: Frontiers in Global Women's Health

#### 9. Urinary Incontinence and Quality of Life: A Cross-Sectional Study.

Authors: Shearon T.L. and Alexander, J. L.

**Publication Date: 2025** 

**Journal:** OTJR: Occupational Therapy Journal of Research

**Abstract:** Over half of women in the United States report urinary incontinence (UI). This condition can be treated conservatively, but many people do not seek treatment. The current correlational study assessed women's knowledge of UI. Specifically, we investigated the relationships between knowledge level about UI and quality of life (QoL), and between severity level of UI and QoL. A convenience cross-sectional sample of 39 older women was obtained from two YMCA locations. Data were analyzed using the Spearman rank-order correlation coefficient. A significant relationship was found between severity of UI and QoL, rs = -.73, p = -.73, p s = .24, p = .13. Results suggested women's knowledge about the causes of UI and conservative therapy is limited. Occupational therapists need to address UI with their patients and educate them about treatment options and availability. Copyright © The Author(s) 2024.

#### 10. A systematic review of the clinical treatment of patients with fecal incontinence by artificial anal sphincter.

Authors: Wang M.; Zhou W.; Liu J.; Liao Y.; Liu B. and Yu, H.

**Publication Date: 2025** 

Journal: Techniques in Coloproctology

Abstract: Background: This study aimed to evaluate and compare the safety and efficacy of artificial anal sphincters in clinical practice.

Method(s): A systematic review of literatures on artificial anal sphincters in PubMed, MEDLINE, EMBASE, Web of Science, and the Cochrane Library was performed. The literature was reviewed three times by several independent investigators, resulting in the identification of 47 studies that met the inclusion criteria. The primary outcomes of interest included adverse events, incontinence assessment, quality of life assessment, and anorectal manometry. Result(s): A total of 12 postoperative complications related to the implantation of the different artificial anal sphincters were reported. Four different incontinence rating scales and four quality of life scales were used to assess patients' fecal incontinence and improvement in quality of life. A total of 29 studies measured changes in patients' anorectal pressure before and after surgery.

Conclusion(s): In terms of safety, patients implanted with an artificial anal sphincter may develop complications such as pain, infection, defecation obstruction, and surgical revision. In terms of effectiveness, different artificial anal sphincters had significant effects on patients with fecal incontinence, but as a result of the insufficient sample size of the study, more relevant

studies are needed for further validation in the future. Copyright © Springer Nature Switzerland AG 2024.

### 11. How important is the timing and duration of pelvic floor muscle training for preventing postpartum urinary incontinence? a meta-analysis

Authors: Wang, Yu; Zhuo, Yan; Yan, Hong and Zhao, Rong

**Publication Date: 2025** 

Journal: International Urology and Nephrology

**Abstract:** Competing Interests: Declarations. Ethics approval and consent to participate: Ethics approval and consent to participate are not necessary since our study is a metaanalysis. Consent for publication: Not applicable. Conflict of interest: The authors declare no competing interests.; Background: Postpartum urinary incontinence (PUI) is a common condition that significantly impairs the quality of life for women who have given birth. This meta-analysis aimed to systematically evaluate how the timing and duration of pelvic floor muscle training (PFMT) influence the prevention of PUI.; Methods: To identify relevant studies examining the role of PFMT in preventing PUI, a thorough literature search was conducted across multiple databases up to February 20, 2025. These databases included PubMed, Embase, Web of Science, ClinicalTrials.gov, OVID, Cochrane Library, Wanfang, CNKI, and Weipu. The search aimed to locate randomized controlled trials (RCTs) that specifically assessed PFMT's impact on PUI prevention. The meta-analysis was subsequently performed using RevMan 5.4 software to synthesize and analyze the collected data.; Results: The metaanalysis included 11 RCTs that collectively involved 2778 parturient women, of whom 1495 received PFMT interventions. The pooled results demonstrated that PFMT significantly reduced the incidence of PUI (p 0.05).; Conclusion: PFMT implemented during pregnancy and the postpartum period effectively reduces the incidence of PUI. Significant benefits of PFMT have been observed at both 3 and 6 months postpartum, indicating its efficacy across different time frames. However, given the limitations in the quality and sample sizes of the included RCTs, further investigation with large-scale, high-quality studies is warranted to more comprehensively elucidate the role of PFMT in managing PUI. (© 2025. The Author(s).)

# 12. Investigating the Effectiveness of Pelvic Floor Muscle Training, Including Sensor-Based Diaphragm Exercises in Women with Stress Urinary Incontinence: A Randomized Controlled Study

**Authors:** Yeşilyurt, Seda Yakit;Piçak, Gonca Şahiner;Göksülük, Merve Başol;Balikoğlu, Meriç and Özengin, Nuriye

**Publication Date: 2025** 

**Journal:** Archives of Physical Medicine and Rehabilitation

Abstract: Competing Interests: Declaration of competing interest The authors declare that

they have no conflict of interest.: Objective: To compare the effects of pelvic floor muscle exercises (PFME) combined with standard diaphragm exercises and 360° expanded diaphragm exercises on urinary symptoms, pelvic floor muscle (PFM) function, and respiratory function in women with stress urinary incontinence (SUI).; Design: Randomized controlled study SETTING: The study conducted between November 2023-2024 at Izmir University of Economics PARTICIPANTS: Women with SUI INTERVENTIONS: Participants were randomly allocated into two groups: PFME+Standard diaphragm (n=37) and PFME+360° expanded diaphragm exercises (n=37). The 360° exercises were taught using two sensor-based biofeedback devices. Both groups completed an 8-week program with weekly sessions.; Main Outcome Measures: Primary outcome=Precontraction of the PFM; secondary outcomes = Incontinence Severity Index (ISI), The International Consultation on Incontinence Questionnaire- short form (ICIQ-SF), PFM and respiratory functions (Maximum inspiratory pressure (MIP) and maximum expiratory pressure (MEP)).; Results: The sociodemographic and clinical characteristics of the PFME+Standard diaphragm (49.29±6.73 years) and the PFME+360° expanded diaphragm exercises groups (50.97±7.70 years) were similar (p>0.05). Before and after the 8-week exercise program, both groups showed significant improvement in PFM functions as well as in ISI, ICIQ-SF, MIP and MEP values (p<0.05). Additionally, the initiation time for PFM contraction during the Valsalva maneuver (pre-contraction of PFM) was reduced in the PFME+360° expanded diaphragm exercises group after treatment (p=0.010).; Conclusions: This study demonstrated that PFME combined with various diaphragm exercises improved urinary symptoms and PFM function in women with SUI. Specifically, PFME with 360° expansion diaphragm exercises reduced the initiation time of PFM contraction during Valsalva. This approach may enhance PFME effectiveness in women with impaired precontraction ability. As this study focused only on women, future research should explore the efficacy of similar interventions in gender-diverse populations. (Copyright © 2025. Published by Elsevier Inc.)

## 13. Effectiveness and safety of acupuncture for the treatment of stress urinary incontinence: A systematic review and meta-analysis.

Authors: Zhang J.; Ma Z.; Shi J.; Shen W.; Wei J. and Han, M.

**Publication Date: 2025** 

Journal: European Journal of Integrative Medicine

Abstract: Introduction: Stress urinary incontinence (SUI) is an involuntary loss of urine on physical exertion, sneezing, or coughing. Acupuncture, a worldwide accepted traditional and complementary medicine, has been widely used in China to treat SUI. This review aims to evaluate the effectiveness and safety of acupuncture for women with SUI.

Method(s): The protocol was registered in PROSPERO (CRD42022361059) and this systematic review (SR) was funded by the National Administration of Traditional Chinese Medicine. Databases including China National Knowledge Infrastructure, Wanfang Database, Chinese Scientific Journal Database, SinoMed, Web of Science, PubMed, The Cochrane Library, and Embase were searched from their inception to October 2023, for relevant randomised controlled trials (RCTs) on the treatment of acupuncture with/without pelvic floor muscle training (PFMT). Study screening and data extraction were carried out independently by two authors. Methodological quality was evaluated using the Cochrane's risk of bias (RoB)

tool 2.0. Meta-analysis was performed by RevMan 5.3.5.

Result(s): A total of 31 RCTs with 2885 patients were included in this SR. The results showed that the combination of acupuncture with PFMT had a better effect than PFMT only in decreasing urine leakage (RR = -1.87, 95 % CI [-2.24, -1.49], 13 studies, 956 patients) and Incontinence Questionnaire Short Form (ICI-Q-SF) scores (RR = -2.26, 95 % CI [-2.64, -1.88], 14 studies, 1015 patients) in women with SUI. Acupuncture compared with sham acupuncture demonstrated improvements in urinary leakage (RR = -4.22, 95 % CI [-5.52, -2.93], 5 studies, 286 patients), and ICI-Q-SF scores with MD and 95 % CI of -3.88(-4.59, -3.17), -8.71(-10.85, -6.57), and -3.10(-3.38, -2.82), respectively. Subgroup analyses of manual acupuncture or electroacupuncture and duration of PFMT treatment can appropriately reduce heterogeneity. For the Egger's test of 1-h pad leakage and of ICI-Q-SF scores, suggesting that there was a small possibility of publication bias in this SR (p = 0.1257 and p = 0.8058, respectively). Adverse events appeared in 12 participants in the acupuncture group and 9 in the sham group.(relative risk = 1.33, 95 % CI = [0.56, 3.15], P = 0.70). The quality of RCTs included in this review was generally poor.

Conclusion(s): Acupuncture has potential in the treatment of SUI in women, and no significant adverse events were reported. However, considering issues with the methodological quality of the included studies, the reliability of this review conclusion may be affected to a certain extent.

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### 14. Pee in Pot (PiP) – A Sustainable Shift in Urine Testing Now Available via NHS Supply Chain

Developed within Somerset NHS Foundation Trust, the PiP (Pee in a Pot) is a sustainable, single solution pulp vessel that simplifies mid-stream urine (MSU) collection while cutting carbon emissions by up to 85%. Now available through the NHS Supply Chain catalogue, PiP replaces multiple plastic items used in conventional testing, reducing waste, spillage risk, and costs.

Backed by clinical evidence and a multi-year innovation journey, PiP is a powerful example of how NHS-led innovation can drive greener, smarter patient care.

#### **Sources Used**

The following databases are searched on a regular basis in the development of this bulletin:

British Nursing Index, Cinahl, Medline, King's Fund & Health Foundation

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