

# NKR 33 Urininkontinens, PICO 2: Bør kvinder med urgency urininkontinens tilbydes blæret træning?

## Review information

### Authors

Sundhedsstyrelsen<sup>1</sup>

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Citation example: S. NKR 33 Urininkontinens, PICO 2: Bør kvinder med urgency urininkontinens tilbydes blæret træning? Cochrane Database of Systematic Reviews [Year], Issue [Issue].

## Characteristics of studies

### Characteristics of included studies

#### Fantl 1991

<b>Methods</b>	<p><b>Study design:</b> Randomized controlled trial</p> <p><b>Study grouping:</b> Parallel group</p> <p><b>Open Label:</b></p> <p><b>Cluster RCT:</b></p>
<b>Participants</b>	<p><b>Baseline Characteristics</b></p> <p>Intervention</p> <ul style="list-style-type: none"> <li>● Age, mean(SD): 66 (8)</li> <li>● Symptoms of stress incontinens, %: 85</li> <li>● Symptom of urge incontinence, %: 57</li> <li>● Use diuretics, %: 35</li> </ul> <p>Control</p> <ul style="list-style-type: none"> <li>● Age, mean(SD): 68 (9)</li> <li>● Symptoms of stress incontinens, %: 76</li> </ul>

	<ul style="list-style-type: none"> <li>● <i>Symptom of urge incontinence, %: 62</i></li> <li>● <i>Use diuretics, %: 33</i></li> </ul> <p><b>Included criteria:</b> Subjects were 55 years or older having at least one episode of involuntary urine loss a week. They lived independently in the community, were mentally intact (Mini-Mental State Examination score &gt; 23), and functionally capable of independent or assisted toileting.</p> <p><b>Excluded criteria:</b> Exclusion criteria were evidence of metabolic decompensation (eg, uncontrolled diabetes mellitus), lower urinary tract infection, urinary obstruction, diverticulum, fistula, reversible cause of UI (eg, fecal impaction), permanent indwelling catheter, or not fulfilling preestablished objective urodynamic criteria for either DI and/or SI as will be defined.</p>
<p><b>Interventions</b></p>	<p><b>Intervention Characteristics</b> Intervention</p> <ul style="list-style-type: none"> <li>● <i>Description:</i> Bladder training was based on principles of behavior modification and consisted of a protocol of patient education and a schedule of voluntary micturition. Patient education involved an audiovisual program followed by verbal and written instructions on how to adapt the program to the individual's life-style. The educational program emphasized the neurological (cerebral) control of lower urinary tract function. The voiding schedule consisted initially of micturitions scheduled every 30 or 60 minutes based on the patient's baseline daytime voiding interval. The patient was instructed to 'go to the toilet and empty your bladder as completely as you can' at the scheduled time regardless of the desire to void. If urgency occurred prior to the assigned voiding time, the individual was instructed to suppress the urge as long as possible using relaxation and distraction techniques and encouraged not to void off schedule. However, if the urgency could not be controlled and the patient perceived that an incontinent episode was imminent, she was not prohibited from voiding. No fluid modifications were used. The patient attended six weekly clinic visits, each lasting approximately 15 to 20 minutes. Each patient kept daily treatment logs, which were assessed at the weekly clinic visit. Voiding intervals were progressively increased by a minute each week if the patient showed a decrease in the number of incontinent episodes and tolerated the schedule without interruptions. The goal of the program was to reach a 2- to 3-hour interval between voidings. During each clinic visit, compliance and progress were assessed. In addition, positive reinforcement and an expression of optimism for a successful outcome were provided. Following the 6-week program, each patient was encouraged to follow the voiding schedule most comfortable for her.</li> <li>● <i>Duration treatment:</i> The patient attended six weekly clinic visits, each lasting approximately 15 to 20 minutes.</li> <li>● <i>Duration follow up:</i> 6 months (but no control group as they received the intervention after a 6-week wait)</li> </ul> <p>Control</p>

	<ul style="list-style-type: none"> <li>● <i>Description</i>: No intervention or clinic contact.</li> <li>● <i>Duration treatment</i>: 6 weeks wait, then 6 weeks treatment</li> <li>● <i>Duration follow up</i>: 6 month (but no control group as they received the intervention after a 6 weeks wait)</li> </ul>
<p><b>Outcomes</b></p>	<p><i>Antal tilfælde af inkontinens</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type</b>: ContinuousOutcome</li> <li>● <b>Measure names</b>: ["End of treatment (6 weeks)", "6 months"]</li> <li>● <b>Reporting</b>: Fully reported</li> <li>● <b>Scale</b>: Antal</li> <li>● <b>Unit of measure</b>: Antal</li> <li>● <b>Direction</b>: Lower is better</li> <li>● <b>Data value</b>: Endpoint</li> </ul> <p><i>Livskvalitet</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type</b>: ContinuousOutcome</li> <li>● <b>Measure names</b>: ["End of treatment (6 weeks)", "6 months"]</li> <li>● <b>Reporting</b>: Fully reported</li> <li>● <b>Scale</b>: Incontinence impact questionnaire (IIQ-7)</li> <li>● <b>Range</b>: 0-3</li> <li>● <b>Direction</b>: Lower is better</li> <li>● <b>Data value</b>: Endpoint</li> </ul> <p><i>Frafald</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type</b>: AdverseEvent</li> <li>● <b>Measure names</b>: ["End of treatment (6 weeks)"]</li> <li>● <b>Reporting</b>: Fully reported</li> <li>● <b>Scale</b>: Antal</li> <li>● <b>Direction</b>: Lower is better</li> <li>● <b>Data value</b>: Endpoint</li> </ul> <p><i>Antal vandladninger per døgn</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type</b>: ContinuousOutcome</li> <li>● <b>Measure names</b>: ["End of treatment (6 weeks)", "6 months"]</li> <li>● <b>Reporting</b>: Not reported</li> </ul>

	<p><i>Patientoplevelt effekt</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type:</b> ContinuousOutcome</li> <li>● <b>Measure names:</b> ["End of treatment (6 weeks)", "6 months"]</li> <li>● <b>Reporting:</b> Not reported</li> </ul> <p><i>Antal vandladninger per uge</i></p> <ul style="list-style-type: none"> <li>● <b>Outcome type:</b> ContinuousOutcome</li> <li>● <b>Measure names:</b> ["End of treatment (6 weeks)", "6 months"]</li> <li>● <b>Unit of measure:</b> Antal</li> <li>● <b>Direction:</b> Lower is better</li> <li>● <b>Data value:</b> Endpoint</li> </ul>
<b>Identification</b>	<p><b>Sponsorship source:</b> This study was supported by Cooperative Agreement AG05170 with the National Institute on Aging and National Center on Nursing Research, Bethesda, Md.</p> <p><b>Country:</b> USA</p> <p><b>Setting:</b></p> <p><b>Comments:</b></p> <p><b>Authors name:</b> J. Andrew Fantl</p> <p><b>Institution:</b> Department of Obstetrics and Gynecology</p> <p><b>Email:</b></p> <p><b>Address:</b> Department of Obstetrics and Gynecology, Box 34, MCV Station, Richmond, VA23298</p>
<b>Notes</b>	

**Risk of bias table**

<b>Bias</b>	<b>Authors' judgement</b>	<b>Support for judgement</b>
Sequence Generation	Low risk	<p>Quote: "DESIGN AND STATISTICAL ANALYSIS A &lt;b&gt;randomized, controlled design was used. Subjects were stratified into two urodynamic categories: those women with stable detrusor function who had SI, and those with DI with or without concomitant SI (DI SI). Because the number of women with pure DI was expected to be low (approximately 1 0%), statistical power considerations dictated that a separate randomization stratum not be established for them. Within each diagnostic stratum, subjects were randomized into the treatment or control&lt;/b&gt; group. Treated subjects underwent the 6"</p>

		Judgement Comment: Probably low risk of due to handmade stratification
Allocation concealment	Unclear risk	Judgement Comment: It is unclear how they concealed the allocation
Blinding of participants and personnel	High risk	Judgement Comment: No details. Probably not blinded - training intervention
Blinding of outcome assessors	High risk	Judgement Comment: This study does not describe the methods for blinding outcome assessors (QoL and antal tilfælde af inkontinens, patient is the outcome assessor) No details. Probably not blinded
Selective outcome reporting	Low risk	Judgement Comment: All outcomes mentioned in the method section were reported on.
Other sources of bias	Low risk	Judgement Comment: No other apparent sources of bias

*Footnotes*

## References to studies

### Included studies

#### **Fantl 1991**

Fantl, J. A.; Wyman, J. F.; McClish, D. K.; Harkins, S. W.; Elswick, R. K.; Taylor, J. R.; Hadley, E. C.. Efficacy of bladder training in older women with urinary incontinence. JAMA 1991;265(5):609-13. [DOI: ]

### Excluded studies

#### **Castleden 1986**

Castleden, C. M.; Duffin, H. M.; Gulati, R. S.. Double-blind study of imipramine and placebo for incontinence due to bladder instability. Age and Ageing 1986;15(5):299-303. [DOI: ]

#### **Colombo 1995**

Colombo, M.; Zanetta, G.; Scalabrino, S.; Milani, R.. Oxybutynin and bladder training in the management of female urinary urge incontinence. A randomized study.. International urogynecology journal and pelvic floor dysfunction 1995;6(2):63-67. [DOI: <http://dx.doi.org/10.1007/BF01962573>]

**Jarvis 1980**

Jarvis, G. J.; Millar, D. R.. Controlled trial of bladder drill for detrusor instability. *British medical journal* 1980;281(6251):1322-1323. [DOI: ]

**Jarvis 1981**

Jarvis, G. J.. A controlled trial of bladder drill and drug therapy in the management of detrusor instability. *British journal of urology* 1981;53(6):565-566. [DOI: ]

**Mattiasson 2003**

Mattiasson, A.; Blaakaer, J.; Høye, K.; Wein, A. J.; Tolterodine Scandinavian Study Group. Simplified bladder training augments the effectiveness of tolterodine in patients with an overactive bladder. *BJU international* 2003;91(1):54-60. [DOI: 3076 [pii]]

**Szonyi 1995**

Szonyi, G.; Collas, D. M.; Ding, Y. Y.; Malone-Lee, J. G.. Oxybutynin with bladder retraining for detrusor instability in elderly people: a randomized controlled trial. *1995;24(4):287-91. [DOI: ]*

**Wallace 2004**

Wallace, S. A.; Roe, B.; Williams, K.; Palmer, M.. Bladder training for urinary incontinence in adults. *The Cochrane database of systematic reviews* 2004;(1)(1):CD001308. [DOI: 10.1002/14651858.CD001308.pub2 [doi]]

**Wiseman 1991**

Wiseman, P. A.; Malone-Lee, J.; Rai, G. S.. Terodiline with bladder retraining for treating detrusor instability in elderly people. *BMJ (Clinical research ed.)* 1991;302(6783):994-996. [DOI: ]

**Wyman 1998**

Wyman, J. F.; Fantl, J. A.; McClish, D. K.; Bump, R. C.. Comparative efficacy of behavioral interventions in the management of female urinary incontinence. *Continence Program for Women Research Group. American Journal of Obstetrics & Gynecology* 1998;179(4):999-1007. [DOI: S0002937898702066 [pii]]

**Yoon 2003**

Yoon, H. S.; Song, H. H.; Ro, Y. J.. A comparison of effectiveness of bladder training and pelvic muscle exercise on female urinary incontinence. *International journal of nursing studies* 2003;40(1):45-50. [DOI: S0020748902000317 [pii]]

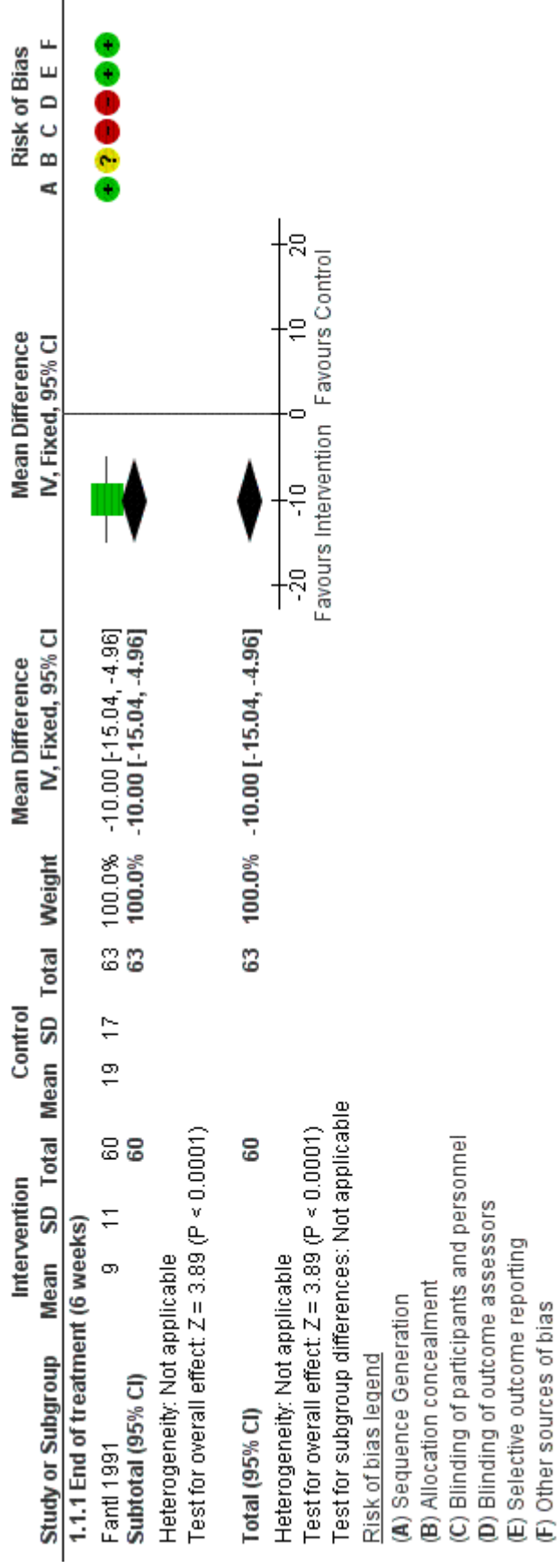
## Data and analyses

### 1 Intervention vs Control

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Antal tilfælde af inkontinens pr. uge	1	123	Mean Difference (IV, Fixed, 95% CI)	-10.00 [-15.04, -4.96]
1.1.1 End of treatment (6 weeks)	1	123	Mean Difference (IV, Fixed, 95% CI)	-10.00 [-15.04, -4.96]
1.2 Livskvalitet	1	82	Mean Difference (IV, Fixed, 95% CI)	-0.25 [-0.45, -0.05]
1.2.1 End of treatment (6 weeks)	1	82	Mean Difference (IV, Fixed, 95% CI)	-0.25 [-0.45, -0.05]
1.3 Antal vandladninger per døgn	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.4 Patientoplevelt effekt	0	0	Mean Difference (IV, Fixed, 95% CI)	Not estimable
1.5 Antal vandladninger per uge	1	123	Mean Difference (IV, Fixed, 95% CI)	-5.00 [-12.55, 2.55]
1.5.1 End of treatment (6 weeks)	1	123	Mean Difference (IV, Fixed, 95% CI)	-5.00 [-12.55, 2.55]

## Figures

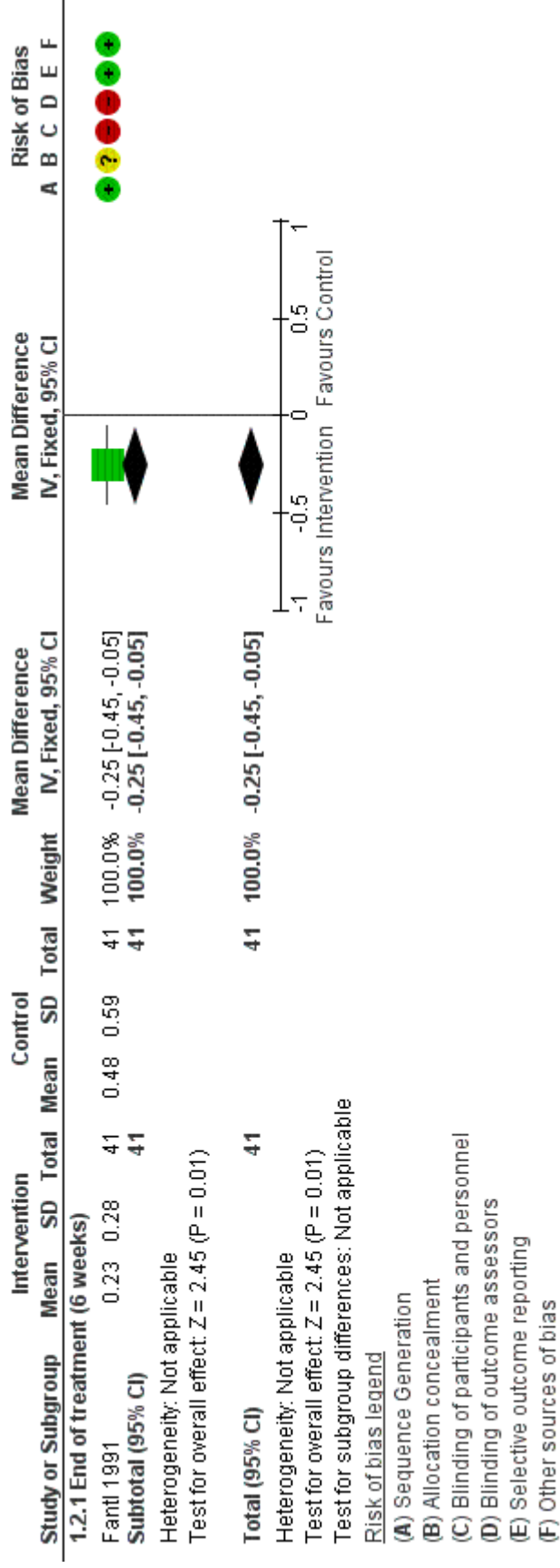
### Figure 1 (Analysis 1.1)



PICO 2: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.1 Antal tilfælde af inkontinens.

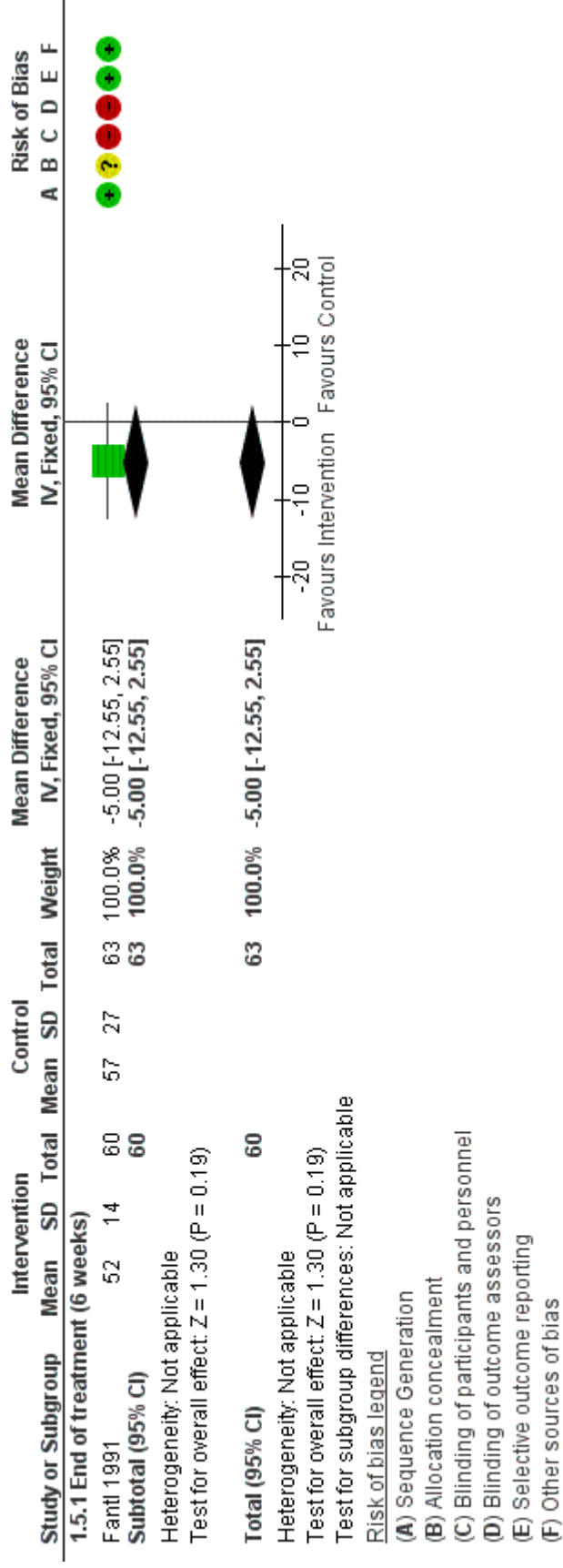
**Figure 2 (Analysis 1.2)**





PICO 2: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.2 Livskvalitet.

**Figure 3 (Analysis 1.5)**



PICO 2: Forest plot of comparison: 1 Intervention vs Control, outcome: 1.5 Antal vandladninger per uge.