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Self-Management of Urinary Incontinence using eHealth

Clinically relevant improvement, treatment effect and factors associated with success

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Akademisk avhandling

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Abstract

Background: Urinary incontinence affects 25-45% of women. Stress urinary incontinence (SUI), defined as leakage upon exertion, is the most common type. First-line treatment includes pelvic floor muscle training (PFMT) and lifestyle advice. eHealth can lower barriers to seek help, increase access and be cost-effective.

Aim: To evaluate clinically relevant improvement, treatment effect and factors associated with success for self-management of urinary incontinence via eHealth.

Methods: In studies 1 and 2, we recruited adult women with weekly SUI and, in study 3, adults with any type of urinary incontinence. All interventions were developed within the research project and included PFMT and lifestyle advice for 3 months. In study 1, participants self-managed, either via the Internet or a brochure. Data were analysed for correlation between Patient Impression of Improvement (PGI-I) and the changes in validated symptoms (ICIQ-UI SF) and in quality of life questionnaires (ICIQ-LUTSqol). We then determined a minimal important difference (MID). In study 2, participants were randomised (1:1) to self-management with the Tät® mobile app or to control group (waiting list). The primary outcomes were ICIQ-UI SF and ICIQ-LUTSqol. Data from the participants that self-managed with the app were analysed to find association with success. For study 3 the analyses included users that completed questionnaires within the app upon download and at 3 months, to find factors associated with: completion of self-management, improvement and success.

Results: In study 1, the symptom and quality of life scores correlated with impression of improvement. MIDs were set at a score reduction of 2.5 points for ICIQ-UI SF and 3.7 points for ICIQ-LUTSqol. (Paper I)

In study 2, 123 women were randomised. Self-management with the Tät® app improved symptoms (mean ICIQ-UI SF reduction: 3.9, 95% CI 3.0 - 4.7), and quality of life (mean ICIQ-LUTSqol reduction: 4.8, 95% CI 3.4 - 6.2). Reductions were significantly larger than in the control group. (Paper II) At 3 months, 56% of participants were much or very much better and considered to be successful. High expectations, weight control and self-assessed improvement of pelvic floor muscle strength were success factors. (Paper III)

In study 3, when Tät® was freely available, 14% (1 861/13 257) completed self-management. Background factors only accounted for 2.7% of the variability in completion. Of those who completed, 68% improved and 29% were successful. Stress type leakage and language were associated with improvement. At least weekly PFMT and app usage predicted both improvement and successful self-management. (Paper IV)

Conclusion: Self-management for urinary incontinence via the Tät® app has a clinically relevant effect on symptoms and quality of life. Women with high expectations and those using the app and performing PFMT at least weekly had more successful results from self-management.

Keywords
Urinary incontinence, pelvic floor muscle training, eHealth, self-management, quality of life, randomised controlled trial

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