

## Systematic review

# Behavioural and pharmacological interventions are more effective than no treatment for urinary incontinence outcomes in women

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**Commentary on:** Balk EM, Rofeberg VN, Adam, GP, *et al.* Pharmacologic and nonpharmacologic treatments for urinary incontinence in women: a systematic review and network meta-analysis of clinical outcomes. *Ann Intern Med* 2019 Mar 19. doi: 10.7326/M18-3227.

## Implications for practice and research

- ▶ Pharmacological and non-pharmacological interventions to treat urinary incontinence (UI) can effectively be implemented for non-pregnant women with UI in order to improve UI outcomes.
- ▶ Future research can examine barriers to implementation of evidence-based interventions for UI as well as educational programmes for nurses to improve knowledge and UI outcomes.

## Context

UI is a prevalent condition across the globe. UI is pervasive in all care settings and communities.<sup>1</sup> There has been significant research regarding non-pharmacological and pharmacological interventions alike that are efficacious in treating UI.<sup>2,3</sup> While this is the case, there have been few changes to the standards of practice. As such, UI management remains a significant issue in homes and care settings despite several effective interventions. This threatens holistic health, severely restricts lifestyle and ultimately decreases quality of life.

## Methods

Balk *et al* conducted a systematic review and network meta-analysis of non-surgical treatments for UI in women. In order to assess the effectiveness of pharmacological and non-pharmacological interventions to improve UI (stress, urgency or mixed) in non-pregnant women, the systematic review collected studies from several sources, ultimately selecting 84 randomised trials for review. Analysis of the studies examined characteristics, results, risk of bias and strength of evidence.

## Findings

There are four conclusions drawn from this review. The major finding of the study was that most pharmacological and non-pharmacological interventions improve UI outcomes compared with no treatment.<sup>2</sup> Additionally, pharmacological treatments were found to be less effective and second-line treatments correspond with mild adverse effects (dry mouth, nausea, etc). Behaviour therapy alone, or accompanied with

pharmacological therapy, is more effective than pharmacological therapy alone for stress and urgency UI. Treatments are generally more effective than sham or no treatment. The final conclusion is that third-line interventions, onabotulinum toxin A injection, neuromodulation and intravesical pressure release are more effective than other approaches.<sup>2</sup>

## Commentary

This article provides several important conclusions that are relevant to nursing research and practice. Balk *et al* found that behavioural interventions to manage UI are generally more effective than pharmacological interventions. Nursing often plays an integral role in the implementation and management of behaviour interventions for patients. As such, more emphasis should be placed on the utilisation of known efficacious behaviour interventions for UI.

Given that some action is generally more efficacious than no action, there are several steps that will be important for nursing to take in order to improve practice.<sup>4</sup> First, nurses should develop a knowledge base regarding the pharmacological therapies of UI with specific knowledge regarding which interventions are most efficacious for various types patients. Second, nurses should also consider implementing education on behaviour therapies for management of UI.

UI management is a multifaceted clinical problem. As such, increased education could assist nurses in order to stay updated with the most appropriate pharmacological and non-pharmacological interventions for the management of UI. Future research can explore the efficacy and improved outcomes that could result from such education programmes.

Finally, given that behavioural interventions were generally efficacious for patients with stress and urgency UI, supported by ample additional research, exploration should ensue regarding ways to eliminate the barriers to implementing behavioural intervention in practice to manage UI. Some of these barriers include the taboo nature of UI and the lack of perceived severity of UI by healthcare staff, etc.<sup>1</sup>

In conclusion, this study by Balk *et al* does an excellent job synthesising the literature on non-surgical interventions to treat UI. Buccci termed nurses 'continence champions', as such, finding ways to overcome the barriers to implementation of these effective behavioural and pharmacological interventions to manage and improve UI outcomes in women with UI, is the direction that is needed in the future.<sup>5</sup>

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