

## Abstract 6

**Title:** An investigation into the Effect of Drinking Caffeinated versus Decaffeinated drinks on symptoms of Overactive Bladder Syndrome: A randomised cross over feasibility study

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**Introduction:** The negative effect of caffeine on overactive bladder (OAB) is largely anecdotal although advice to reduce intake is widespread.

**Aim:** To test the potential effect size of caffeine reduction and the feasibility of a clinical trial we carried out a small study to investigate the effect of drinking caffeinated versus decaffeinated fluids on symptoms of OAB in adult women.

**Methods:** An eight week double-blinded randomised cross-over study design was adopted at a single centre. Inclusion criteria were >18 yr, experiencing OAB symptoms and consuming 2+ caffeinated drinks per day. Outcomes were bladder diary results and ICIQOAB scores completed during the final week of testing.

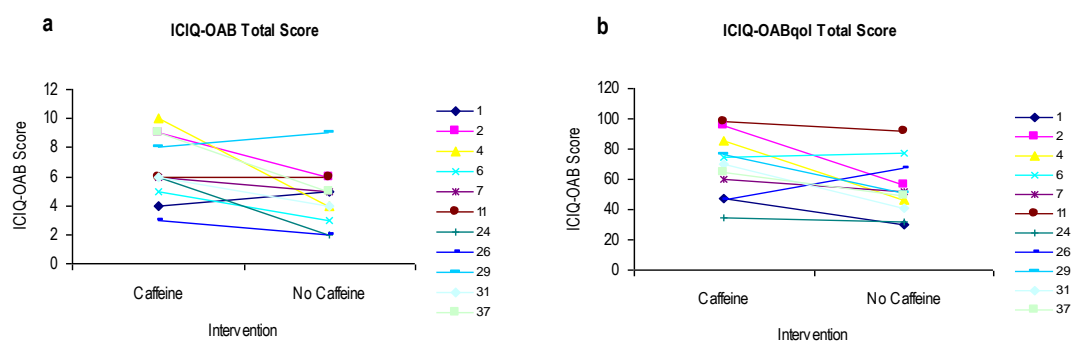
Fourteen participants (Mean age 52.07 years ;range 27-79 years) were recruited.

**Results:** Eleven participants completed both periods of the study.

All measures showed a directional change in favour of the decaffeinated period. A significant decrease in the mean number of urinary voids (8.73 vs. 7.54;  $P < 0.01$ ) and the mean number of urinary voids (8.82 vs 8.36;  $P < 0.05$ ) was found on day 3 during the decaffeinated period vs. caffeinated.

A significant improvement was found in the ICIQ-OAB total score (Figure 1a) with a greater mean value (i.e worse) obtained during the caffeine period compared to decaffeinated (6.55 vs 4.64;  $P < 0.01$ )

Figure 1



**Interpretation:** This feasibility study indicates that reducing caffeine intake by replacing caffeinated with decaffeinated beverages may alleviate the severity of some symptoms. Caffeine withdrawal symptoms were minimal and most women were unaware which product they were drinking. However recruitment was challenging and this would need to be addressed before further clinical trials.

**Conclusion:** This small cross-over study of caffeine substitution is the first to be carried out on women with OAB and indicates that caffeine abstinence may improve OAB symptoms, although only a modest effect size is likely.

### References:

1. Bryant CM, Dowell CJ, Fairbrother G (2002), Caffeine reduction education to improve urinary symptoms. British Journal of Nursing, 11, 560-565