

Momentary Relationships between Anxiety and Urinary Urgency

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Introduction

- Overactive bladder (OAB) is a syndrome of urinary symptoms defined by urinary urgency.
- Anxiety is reported in up to 48% of individuals with OAB and has detrimental impacts on quality of life.^{1,2}
- Although cross-sectional research indicates a positive relationship between anxiety and urinary urgency, both vary in daily life and are not well-captured at a single timepoint.
- This study applied ecological momentary assessment (EMA) to examine concurrent and lagged relationships between anxiety and urgency among individuals with and without OAB.**

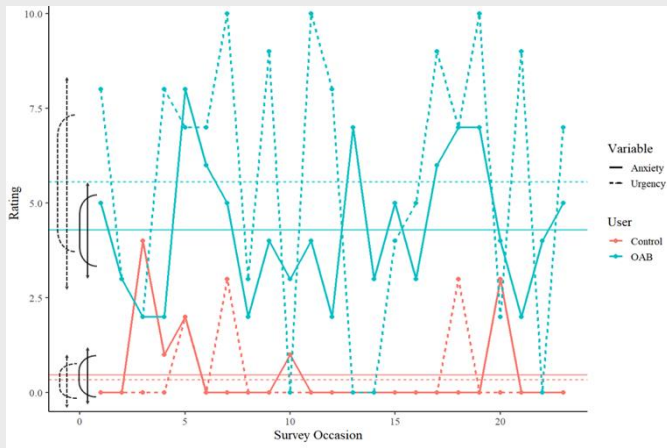


Figure 1 displays exemplary case comparison of anxiety and urgency rated over 23 occasions in a patient with OAB versus a healthy control. Rounded brackets represent variability and vertical arrows instability around each participant's average.

Method

- Individuals with active OAB symptoms (OAB v3≥4) and healthy controls (HC) completed a series of daily prompts evaluating affective anxiety and urgency on a 0-10 scale.
- 325 participants completed measures at 4 daily prompts over 7 days.

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Results

- Multilevel models (MLMs) with measurement occasions (Level 1) nested within individuals (Level 2) were used to predict contemporaneous and subsequent urinary urgency via anxiety.
- Anxiety concurrently predicted urinary urgency ($b = .11, p < .0001$).
- Anxiety also predicted urgency at the following timepoint ($b = .042, p = .021$).

	b	95% CI	p
Anxiety (t)	.11	[.067, .147]	<.00001
Anxiety (t-1)	.04	[.006, .078]	.02

Figure 2 displays concurrent (t) and lagged (t-1) relationships between anxiety and urgency in individuals with active OAB symptoms.

Discussion

- These findings are the first to test and affirm theoretical models proposing the delayed impact of anxiety on LUTS.
- Results suggest a complex and reciprocal system of influence of psychological distress and urinary symptoms.
- Future research should explore mechanistic links between psychological and urinary symptoms in OAB.

