

# Posttraumatic Stress in Women with Pelvic Floor Disorders – A Case for Trauma-Informed Urogynecologic Care

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## Background

- Lower urinary tract symptoms (LUTS) from pelvic floor dysfunction are common and often a functional manifestation of emotional distress<sup>1,2</sup>
- We found an association between anxiety and LUTS in a pilot RCT of cognitive behavioral therapy (CBT) for women with LUTS and anxiety<sup>3</sup>
- Prior research has found associations between LUTS and childhood trauma (adverse childhood experiences, ACEs)<sup>4,5</sup>
- To date, studies have not examined lifetime exposure to trauma, which we hypothesized strengthens the relationship between posttraumatic stress symptoms (PTSS) and LUTS (Figure 1)

## Methods

### PROCEDURE:

- Recruited patients presenting to a urogynecology clinic with anxiety and chief complaint of LUTS (urgency, frequency, nocturia, leakage, hesitancy, straining)<sup>3</sup>
- Patients were randomized to receive 12 weekly sessions of transdiagnostic CBT or supportive therapy (active control)<sup>3</sup>
- **This is a secondary analysis of archival baseline data. We conducted bivariate Pearson correlations among trauma, LUTS, and other psychosocial factors (e.g., baseline anxiety symptoms)**

### PARTICIPANTS: N = 38

- Age: Mean(SD) = 43(16) years
- Race: 76% White, 16% Black, 3% Asian, 5% Other
- Hispanic/Latinx ethnicity: 13%
- Educational attainment: 5% high school or below, 16% some college, 55% college degree, 24% advanced degree

### MEASURES:

- Pelvic Floor Distress Inventory (PFDI-20) measured bothersome pelvic floor distress across three subscales: Pelvic Organ Prolapse Distress (POPDI), CRAD (Colorectal Anal Distress), UDI (Urinary Distress Inventory) as a measure of LUTS
- PTSD Checklist for DSM-5 (PCL-5) with Life Events Checklist (LEC) assessed trauma history and PTSS
- Patient Reported Outcomes Measurement Information System (PROMIS) Profile 29: Depression and Anxiety subscales

Table 1.	No PTSD (n = 28)	PTSD (PCL-5 ≥ 33) (n = 9)	Overall (N = 38)
	<i>Mean (SD)</i>		
PCL-5 Total	12.1 (8.79)	46.1 (13.5)	20.4 (17.8)
Missing	0	0	1
PFDI	78.4 (44.8)	109 (77.1)	84.9 (54.5)
POPDI	21.4 (18.4)	33.3 (30.5)	23.7 (22.2)
CRAD	12.6 (19.4)	22.9 (27.6)	15.0 (21.4)
UDI	44.3 (21.6)	53.2 (27.1)	46.2 (22.8)
Anxiety	60.3 (5.12)	65.0 (6.82)	60.9 (6.70)
Depression	52.2 (9.74)	61.9 (4.51)	54.6 (9.54)

## Conclusions

- Although PTSS were not significantly associated with LUTS, PTSS were associated with bowel symptoms
- Similarly, directly experiencing or witnessing traumatic life events was not associated with LUTS, but was significantly and positively associated with pelvic floor distress overall, pelvic organ prolapse, and bowel symptoms
- Women with LUTS experienced PTSD at a higher level (24%) than US women (yearly prevalence estimates ~5%)<sup>6</sup>
- Usual pelvic floor disorder care can be invasive (pelvic floor physical therapy, surgery)—future research should investigate trauma-informed care for these patients

## Selected References

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## Objective

To quantify relationships among lifetime trauma, PTSS, and LUTS for women with LUTS, we conducted a secondary analysis of baseline pilot RCT data (Trial: NCT03623880).

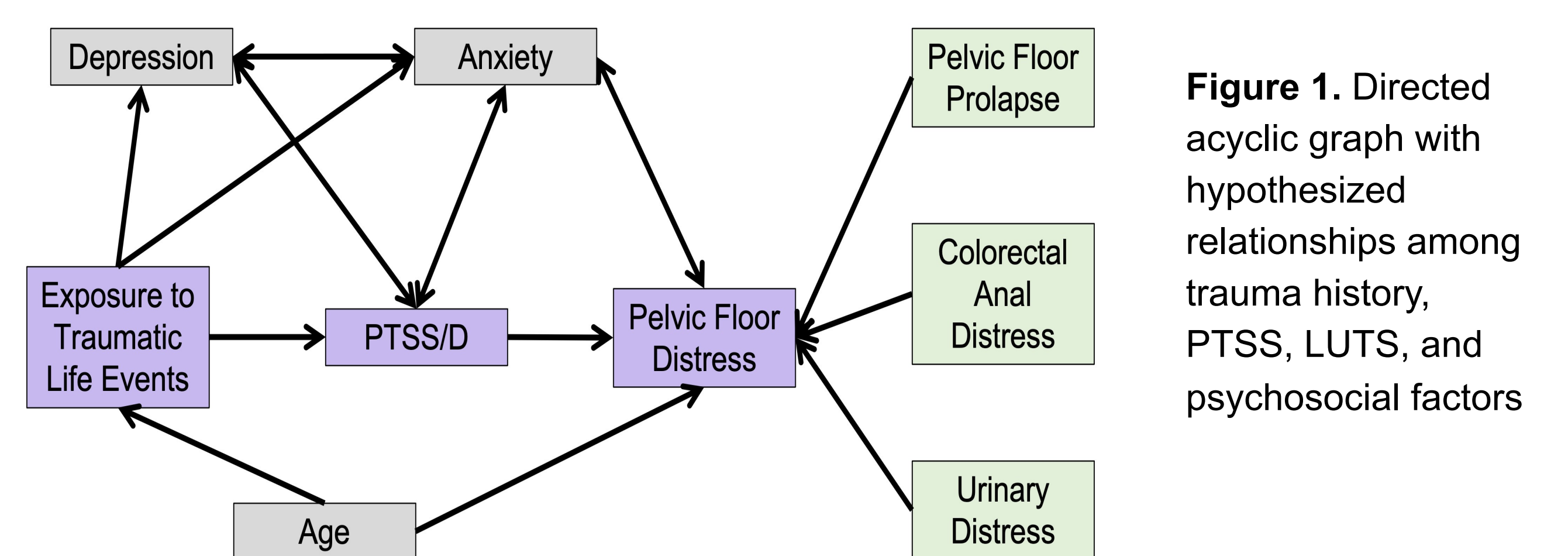


Figure 1. Directed acyclic graph with hypothesized relationships among trauma history, PTSS, LUTS, and psychosocial factors

## Results

### Descriptives (Table 1):

- 74% (n = 28) directly experienced/witnessed ≥ 2 traumatic life events
- 24% (n = 9) had a baseline PCL-5 ≥ 33, consistent with PTSD

### Bivariate Correlations (Figure 2):

- PCL-5 total was not associated with LUTS,  $r = .08$ ,  $p = .63$ , but was significantly associated with colorectal-anal distress,  $r = .34$ ,  $p = .04$ .
- Preliminary PTSD diagnosis was not associated with LUTS,  $r = .17$ ,  $p = .32$
- Number of directly experienced/witnessed LEC was associated with total pelvic floor distress ( $r = .50$ ,  $p = .001$ ), pelvic organ prolapse ( $r = .44$ ,  $p = .005$ ), and colorectal-anal distress ( $r = .54$ ,  $p = .001$ ), but was not associated with LUTS ( $r = .26$ ,  $p = .12$ ).

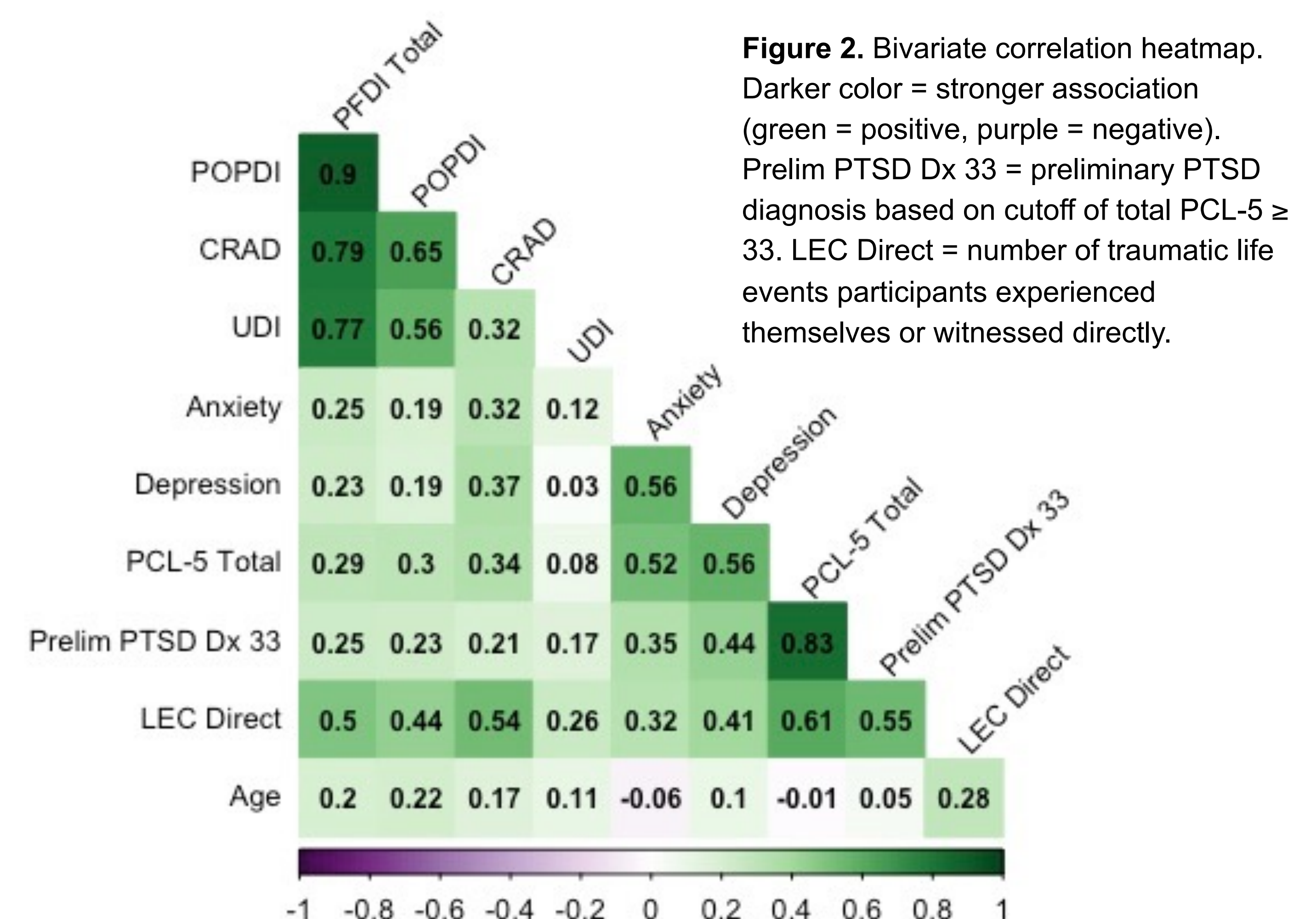


Figure 2. Bivariate correlation heatmap. Darker color = stronger association (green = positive, purple = negative). Prelim PTSD Dx 33 = preliminary PTSD diagnosis based on cutoff of total PCL-5 ≥ 33. LEC Direct = number of traumatic life events participants experienced themselves or witnessed directly.

## Funding

- Women's Board of Northwestern Memorial Hospital: Evergreen Invitational Grants Initiative
- NIDDK T32DK062716
- NIMH T32MH115882

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