CHRONIC PAIN IN THE AFTERMATH OF SEXUAL ASSAULT

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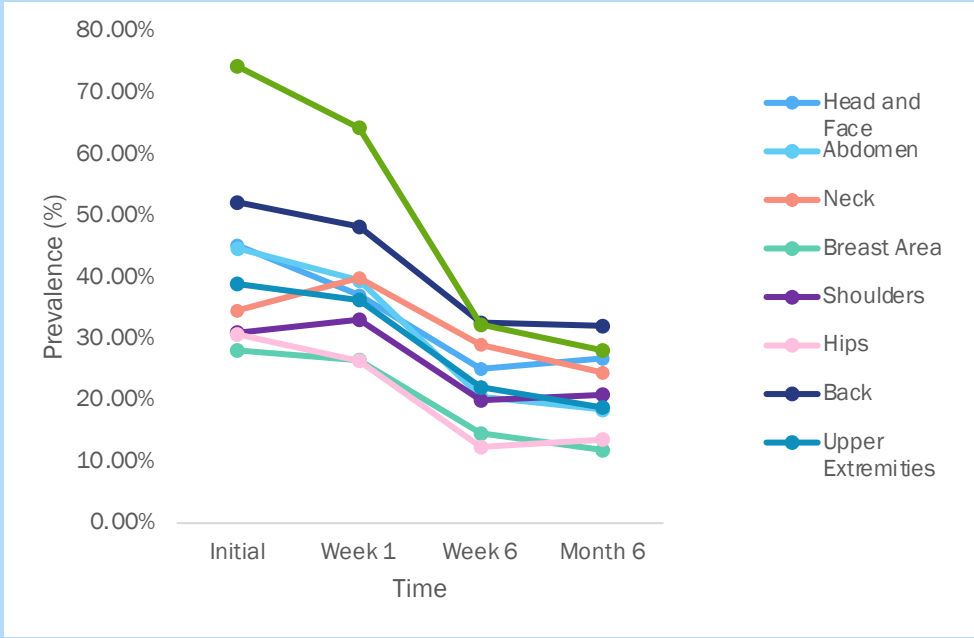
QUESTION AND SIGNIFICANCE

- **QUESTION**: Is the development of chronic pain after sexual assault partly the result of stress-induced mechanisms rather than physical injury?
- **SIGNIFICANCE**: Acute and chronic pain is a common consequence of sexual assault. Previous research studies conducted by the UNC Institute for Trauma Recovery have shown that Clinically Significant New or Worsening Pain (CSNWP) occurred months following assault in body regions that did not experience physical injury. Such results give rise to the implication that chronic pain is not necessarily related to physical injury, and may develop through other mechanisms. I worked towards understanding the etiology of chronic pain development by analyzing the statistical associations between pain and physical injury using results from a large-scale prospective study (N=706, Mage = 28.4 years, 57.3% white, 15.0% Black). Such an understanding is widely applicable to providing successful care for sexual assault survivors.

RESULTS

	Initial CSNWP *n* (%)		One Week CSNWP *n* (%)		Six Week CSNWP *n (%)*		Six Month CSNWP *n* (%)	
Physical Injury:	Yes	No	Yes	No	Yes	No	Yes	No
Body region								
Any	276 (44.4%)	346 (55.6%)	265 (44.5%)	330 (55.5%)	177 (43.3%)	232 (56.7%)	151 (45.2%)	183 (54.8%)
Abdomen	15 (4.8%)	297 (95.2%)	8 (2.9%)	266 (97.1%)	5(3.9%)	124 (96.1%)	4 (3.9%)	98 (96.1%)
Back	21 (5.8%)	344 (94.2%)	22 (6.5%)	315 (93.5%)	11 (5.4%)	194 (94.6%)	13 (7.3%)	165 (92.7%)
Breast Area	15 (7.6%)	182 (92.4%)	13 (7.0%)	172 (93.0%)	5 (5.4%)	87 (94.6%)	3 (4.5%)	63 (95.5%)
Head and face	103 (32.4%)	215 (67.6%)	90 (34.6%)	170 (65.4%)	50 (31.6%)	108 (68.4%)	35 (23.5%)	114 (76.5%)
Hips	14 (6.5%)	203 (93.5%)	11 (5.9%)	174 (94.1%)	5 (6.4%)	73 (93.6%)	2 (2.7%)	73 (97.3%)
Lower extremities	44 (8.4%)	478 (91.6%)	37 (8.2.%)	413 (91.8%)	19 (9.3%)	185 (90.7%)	11 (7.1%)	145 (92.9%)
Neck	91 (37.4%)	152 (62.6%)	84 (30.2%)	194 (69.8%)	45 (24.6%)	138 (75.4%)	31 (22.8%)	105 (77.2%)
Shoulders	15 (6.9%)	203 (93.1%)	13 (5.46%)	219 (94.4%)	6 (4.7%)	121 (95.3%)	6 (5.1%)	111 (94.9%)
Upper Extremities	41 (15.0%)	232 (85.0%)	36 (14.2%)	218 (85.8%)	18 (13.0%)	120 (87.0%)	19 (14.5%)	112 (85.5%)

Note. CSNWP = clinically significant new or worsening pain, defined as increase in pre-assault pain by ≥ 2 points on a 0 to 10 numeric rating scale.[3] * = $p < .05$, ** = $p < .01$, *** = $p < .001$.



- The table (left) shows the rates of physical injury (or lack thereof) among those who experienced CSNWP over a timespan of six months. The graph (right) depicts the rates of CSNWP in eight body regions over a timespan of six months.
- My results show that a large proportion of those who experience CSWNP did *not* experience physical injury in those body regions, suggesting that the development of chronic pain is associated with mechanisms other than injury.
- SIGNIFICANCE:
  - <u>To the scholarly community</u>: these results agree with previous studies that chronic pain development among sexual assault survivors is not always associated with physical trauma/injury. This calls for further research into the etiology of chronic pain development.
  - <u>To the general audience</u>: these results hold implications on the need for preventive care for sexual assault survivors experiencing chronic pain.