

Preliminary: The Effect of Allied Health Educational Intervention on Post-Surgical Opioid Use and Pain



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Introduction

- Despite advances in surgical techniques, up to 50% of patients develop Chronic Post-Surgical Pain CPSP one-year post-op major surgery.^{1,2}
- CPSP is associated with many negative impacts including impairment of function and quality-of-life, delayed recovery time, prolonged duration of opioid use, and higher health-care costs.^{2,3}
- A significant proportion of chronic pain and problematic opioid use can be linked to the acute phase after major surgery.³⁻⁵
- Many patients have psychological vulnerability and are offered very little in terms of intervention.³
- Factors associated with greater probability of pain chronicity, include pain catastrophizing, sensitivity to pain traumatization, anxiety and depressive symptoms.^{4,5}
- **Aim:** to evaluate the effectiveness of individualized allied health education session on improving patient outcomes and reduce opioid doses in a Transitional Pain Clinic (TPC).

Methods

Participants

- Adult patients (ages ≥19) in surgery or trauma treated at VGH TPC
- A provider who can prescribe pain medications after TPC discharge
- Allied Health intervention

Measures

- Primary: Opioid Monitoring Sheet from TPC assessments used to calculate Oral Morphine Equivalents (OME)
- Secondary: Pre- and Post-Discharge Scales
 - Brief Pain Inventory (BPI)
 - Pain Catastrophizing Scale (PCS)
 - GAD-7
 - PHQ-9

Data Analysis

- Mann-Whitney U test for OME
- Paired T test for mean change scales

Results

Table 1. Change in Oral Morphine Equivalents

	Allied Health	Non-Allied Health
N	66	66
Median Values	1	20
Interquartile Range	0-52.5	0-60
P value	0.22	

Figure 1. Mean Change of Secondary Measures, n=52

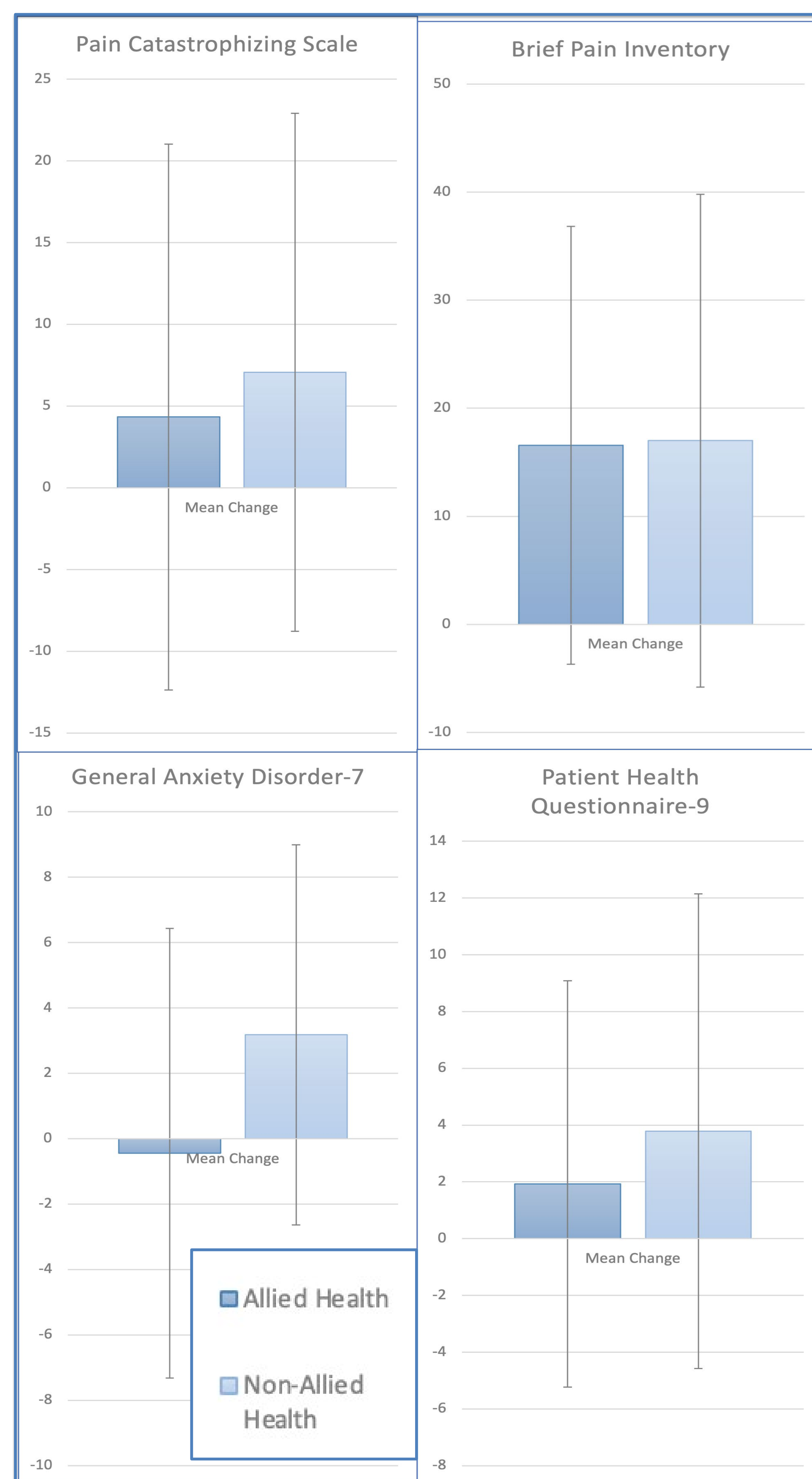


Table 2. Paired T-test of Secondary Measures

Scale	P-value
PCS	0.64
BPI	0.95
GAD-7	0.09
PHQ-9	0.48

Summary

- Allied health education intervention did not reduce opioid use ($p > .05$) (Table 1)
- Allied health education intervention did not impact the PCS ($p > 0.05$) (Table 2)
- Allied health education intervention did not impact the BPI ($p > 0.05$) (Table 2)
- Allied health education intervention did not impact the GAD-7 ($p > 0.05$) (Table 2); however, trending towards
- Allied health education intervention did not impact the PHQ-9 ($p > 0.05$) (Table 2)

Conclusion

- The allied health education intervention was not shown to be effective at reducing opioid doses nor patient outcomes
- We wonder if patients who were referred to received the allied health education intervention were likely at more risk of experiencing CPSP with more comorbidities and risk factors. This would make them more refractory to improvements in the measures studied.
- Areas for future research include identifying differences in these groups This could include type of surgery, severity of injury, substance use, psychiatric and physical comorbidities.

References

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