

# TAI CHI: AN EVIDENCE-BASED INTERVENTION FOR LOWER BACK PAIN



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## Background / Purpose

- LBP can have a significant negative impact on readiness and military operations.
- Among active duty military personnel, LBP has been identified as one of the most frequent reasons for seeking medical care.
- Tai Chi has been demonstrated to be a safe and cost-effective intervention to improve pain and decrease self-reported disability.
- Tai Chi has not been evaluated as an intervention for active duty military members with a diagnosis of chronic LBP.

### PICOT Question

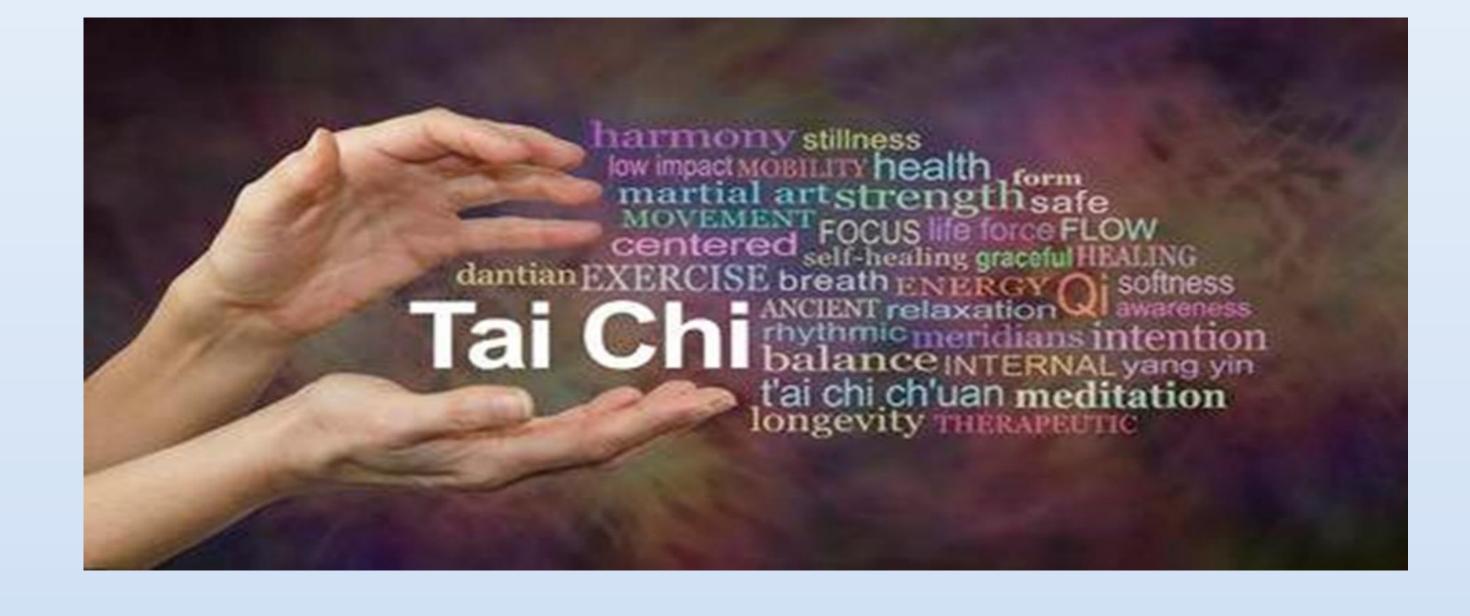
In active duty personnel being seen in an outpatient military clinic with lower back pain how does participation in a weekly Tai Chi session compared to current practice affect pain management?

## Synthesis Tables



### References





## Practice change

- Based upon the evidence, a 10-week Tai
   Chi intervention consisting of participation
   in a weekly 1 hour Tai Chi class taught by
   a certified instructor was recommended
   and implemented.
- Self-reported pain disability scores were collected pre and post intervention using the Pain Disability Index (PDI) and the Quebec Back Pain Disability Scale (QBPDS).
- A decrease in self-reported disability on the PDI or QBPDS would demonstrate clinical significance.



#### Results

- 14 active duty personnel with a documented history of chronic LBP took part in the initiative.
- Due to challenges associated with the COVID pandemic, only 2 participants completed both the pre and post intervention self-report questionnaires.
- The participant's scores on the PDI and QBPDS demonstrated clinical significance.
- Participant #1 reported a 9 point decrease on the PDI and a 9 point decrease on the QBPDS.
- Participant #2 reported a 15 point decrease on the PDI and a 14 point decrease on the QBPDS.
- These findings support the use of Tai Chi as an effective, evidence-based intervention for the management of chronic LBP

## Relevance to Military Nursing

- The VA/DOD Clinical Practice Guideline for Diagnosis and Treatment of Low Back Pain recommends offering Tai Chi for chronic lower back pain.
- Active duty personnel with a documented history of lower back pain took part in the initiative.
- The intervention demonstrated clinical significance as participants self-reported a decrease in disability on the PDI and the QBPDS, and support the use of Tai Chi.