

# The Use of Guided Imagery to Improve Pain and Anxiety in Same-Day Surgery Patients at the VA New Jersey Health Care System. Phase II

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#### Introduction

Symptoms of pain prompt veterans to see health care providers more often than any other symptoms

- Although it has been deemed desirable to use a multimodal analgesic technique to provide adequate analgesia without sideeffects to reduce the chances of developing chronic postoperative surgical pain, even minor surgery is at risk for its development (Lamacraft, 2012).
- Severe pain was 40 percent greater in Veterans then non-veterans, especially among those who served in recent conflicts
- This Phase II project is a Health Care Delivery Innovation, a continuation of a pilot project which introduced a low cost easily taught kit to deliver a guided imagery session to presurgical patients at the Veterans Administration hospital on the day of surgery to improve pain and anxiety.

## Background & Significance

- The Veteran Health Administration is America's largest integrated health care system, providing care at 1250 health care facilities, including 172 medical centers and 1069 outpatient sites of care of varying complexity (VHA outpatient clinics), serving 9 million enrolled Veterans each year (U.S. Department of Veterans Affairs, 2018).
- Guided imagery has been defined, as a directed, deliberate daydream that uses all senses to create a focused state of relaxation and a sense of physical and emotional well-being (Gonzales et al., 2010).

#### Problem

- The Veterans Health Administration, National Pain Management Strategy, initiated on November 12, 1998, established Pain Management as a national priority (Lee, 2018).
- Veteran Administration National Pain Management Strategy provides a system-wide standard of care to reduce suffering from preventable pain. (VA, Research on Pain Management, 2015)

#### Methods

Design: quasi-experimental, pre and post surgery data recording.

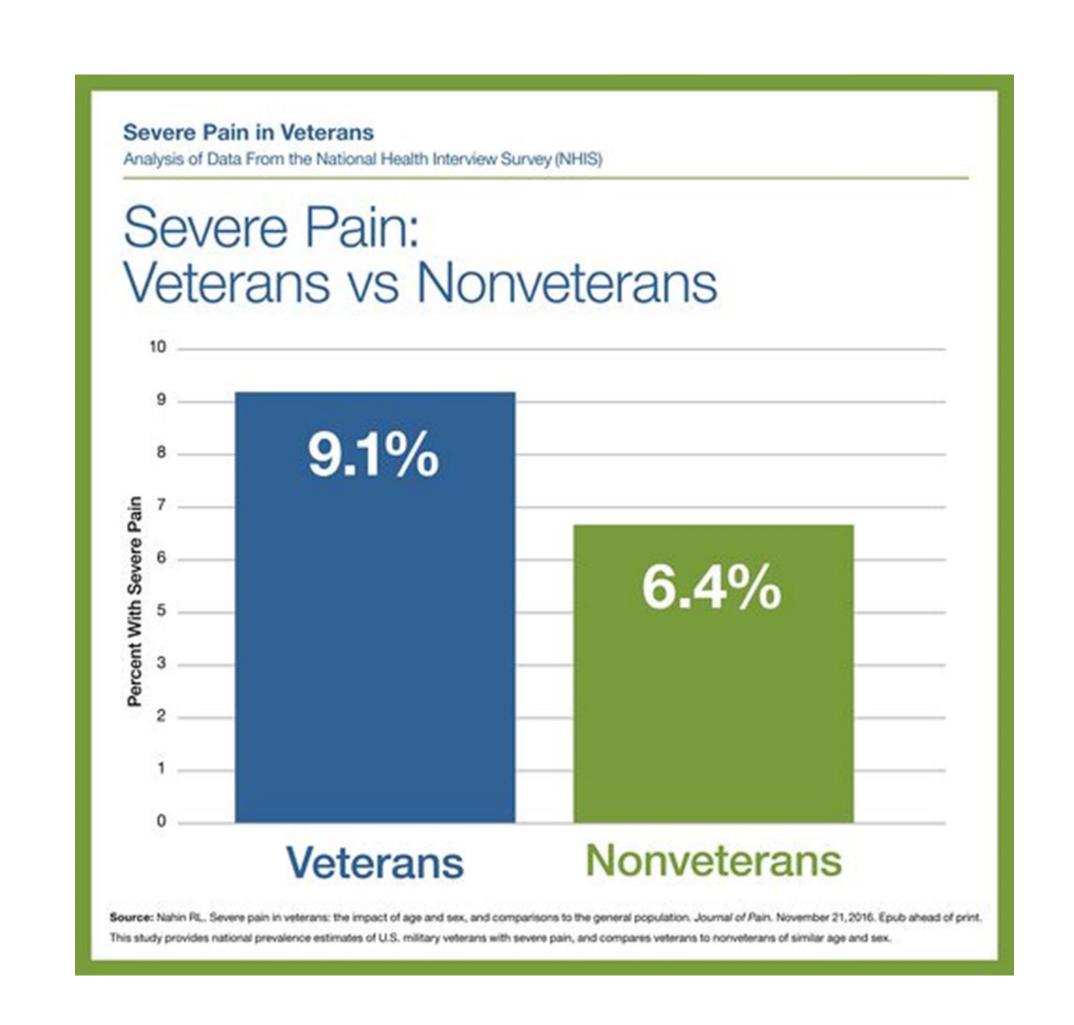
**Study Population:** convenience sample of 40 patients waiting for procedures in Same Day Surgery

**Settings:** Same Day Surgery unit, on the day of scheduled surgery or procedure.

**Interventions**: The DNP student explained to the patient the different items of the guided imagery kit. The patients received the guided imagery kit with an MP3 player, which can play digital audio files, a choice of headphones or earbuds, and a sleep mask. MP3 players were preloaded with the prerecorded guided imagery verbal coaching script by Belleruth Naparstek called, "Meditations to Promote Successful Surgery" After instructions, using the visual instruction tools the patients, were instructed to listen to the guided imagery sequence at least once. In the same day surgery Unit, after the patient listened to the guided imagery sequence an immediate post intervention set of pain and state-trait anxiety score was taken by DNP student and recorded. This, was done while the patient still in the pre-op setting before the patient was called to the OR. The pain score and STAI was taken in PACU, in SDS at discharge and Seven days, telephone interview

#### Results

**Demographics**: The average age of patients veterans was 59.5 years with a range of 25 to 89 years of age. Majority of patients, 87.5% (n=35) were male. Caucasian, 50% (*n*=20). Afro-Americans representing 32.5%(*n*=13) and Latino 17.5% (*n*=7). A small percentage 12.5% of the patients (n=5) were female. The outcome measures on pain and anxiety were analyzed as to extent that they met the normality assumptions of parametric testing. The Kolmogorov-Smirnoff and the Shapiro-Wilks test results indicated that the pain data were not normally distributed(p values=.000 for all timeframes). The interventions showed improvement of scores on anxiety except for few patients who were waiting for the biopsy result. Evaluated parameters on the State-Trait Anxiety Inventory finding were significant. The baseline mean trait anxiety score pre intervention was 46.83



#### Discussion

- \* To enhance the use of Guided Imagery for reducing pain and anxiety, we made recommendations methods to improve pain management for future adaptations programs for the next phase implementation.
- \* Plantree is interested to adapt Guided Imagery for inpatient population
- War Related Illness and Injury Study Center(WRIISC) is interested to adopt Guided Imagery for PTSD patients at VA East Orange Hospital
- VA Integrative Medicine is interested to adapt Guided Imagery into existing bedside audio visual program

## **Implications**

- The findings of this project suggest a significant reduction in pain symptoms and stress.
- It will address to Opioid Crisis, adverse events, and opioid overdose, because patients will require fewer pain medications.
- Cost effective to VA Healthcare system
- Health benefit to patient
- Impact on patient's quality of life
- The results indicate significant and substantial reduction in pain and anxiety also reduce symptoms of depression and PTSD.

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