Veterans Yoga Project
Subjective Pain and Distress Analysis
2019

Veterans Yoga Project (VYP) provides Mindful Resilience Yoga (MRY) classes to veterans in multiple settings. The program is adapted to the safety, predictability, and comfort needs of the veterans, including the use of adaptive and chair yoga. The yoga program is staffed by a teacher trained by Veterans Yoga Project. This analysis includes seven programs at US Department of Veterans Affairs locations and a Veterans Centers that focus on mental health, PTSD, serious mental illness, and general outpatient needs. Classes were offered across six facilities and taught by seven teachers.

Program Impact

VYP has completed an evaluation of effectiveness of the program during 496 yoga classes for the all of 2019. Programs included:
- Charlotte VA Health Care Center PTSD Program, North Carolina
- Eugene Vet Center, Oregon
- Eugene VA Health Care Center, Oregon
- Everett Veterans Center, Washington
- Kernersville VA Health Care Center PTSD Program, North Carolina
- Northport VA Mental Health Clinic, New York
- Northport VA Psychosocial Rehabilitation and Recovery Center, New York
- Northport VA Substance Abuse Recovery and Rehabilitation Program, New York

Veterans provided subjective ratings of their pain and stress before and after each yoga class. These consisted of pre and post self-assessments of current pain using a numeric rating scale and stress using the Subjective Units of Distress Scale (SUDS). Both pain and stress were assessed on a scale of 0 through 10 in which zero is no pain or stress and 10 is extreme pain or stress. These scales enable the class participants, the instructor, and the clinical staff to note changes associated with each class.

Over this period, pain assessments both before and after each class were reported for a total of 1909 encounters. With regards to pain, 76% of all encounters were associated with a reduction in pain and the average pain reduction for all encounters was 37% (Note: these included participants with starting pain of zero). Further, 48% of participants experienced at least a 2-point improvement in pain, a common threshold for meaningful pain improvement in clinical
settings. When pain score analysis was limited to only those encounters with pain scores of five (5) or greater at the beginning of class, 85% of encounters were associated with a reduction in pain with an average pain reduction of 32%. Of those, 62% experienced at least a 2-point improvement in pain.

Over this period stress assessments both before and after each class were reported for a total of 1893 encounters. With regards to stress, 87% of all encounters were associated with a reduction in stress. The average stress reduction for all encounters was 47%. When stress score analysis was limited to only those encounters with stress scores of five (5) or greater at the beginning of class, 92% of encounters were associated with a reduction in stress with an average stress reduction of 42%.

Any increases in pain or distress may represent a variety of experiences, such as granting oneself permission in the safe space of yoga class to experience one’s current mental and physical state, whether positive or negative, and decrease the use of physical and mental avoidance strategies. Increases in these cases are increases in self-awareness and not always an increase in underlying conditions. Instructors use individual and class data to support attendees in their wellness goals and to avoid exacerbation of pain and distress. Actions may include offering more practice modifications, changing a class structure, offering education and adaptive attitudes for yoga practice, and notifying medical staff of participants’ experience for additional care outside of class. Our instructors take participants’ feedback seriously and work with them and host organizations to support recovery and resilience.

Class participants provided 133 written and verbal statements to instructors about the classes, including:

“Very, very relaxing”  “Wrist and shoulder pain is remarkably better”  “Had vertigo-better now”  “Amazing class”  “Need to do more often”  “amazing best therapy”
“Nicely relaxed”  “Didn’t think my pain level would come down but it did.”
“First class. Love it.””  “One of the best ways I can let everything go, amazing class”
“So grateful to be doing yoga. Fantastic session helped with my anxiety today”  “feel good took away my headache”

Respectfully Submitted,

Timothy Avery, Psy.D.
Director of Program Evaluation
Veterans Yoga Project
Pain Change by Score Improvement (All)

Change in Pain for Total Encounters
- Decrease: 76%
- No Change: 20%
- Increase: 4%

Change in Pain for Starting Pain 5 or Higher
- Decrease: 85%
- No Change: 11%
- Increase: 4%

Improvement in Pain for Starting Pain 5 or Higher
- Count of Encounters: 0, 10, 20, 89, 185, 233, 127, 74, 61
Distress Change by Score Improvement (All)

Change in Distress for Total Encounters
- Decrease: 87%
- No Change: 12%
- Increase: 1%

Change in Distress for Starting SUDS 5 or Higher
- Decrease: 92%
- No Change: 7%
- Increase: 1%

Improvement in Distress for Starting SUDS 5 or Higher