

ABSTRACT

Background: Recent studies have consistently shown beneficial effects of complementary and alternative treatment modalities such as Yoga Therapy, Ayurveda and Naturopathy on Osteoarthritis, but it is not known whether combination of these therapies will have any synergistic effect or not.

Aim: To assess and compare the effect of Ayurveda and Naturopathy therapies as an add-on to Yoga Therapy on clinical symptoms, anthropometric measures and psychological states in individuals with Knee Osteoarthritis.

Methodology: This study involves forty Seven subjects (21 males and 26 females) within the mean age range of 45.19 ± 3.39 , suffering from Knee Osteoarthritis since last 3.37 years on an average. They were admitted in a residential holistic therapy hospital for a week-long treatment program and were allocated into one of the three treatment programs based on their preference and clinician's advice: a) Yoga Therapy (n=16), b) Yoga Therapy + Ayurveda (n=21) and c) Yoga Therapy + Naturopathy (n=10). Assessments were done at baseline and after one week of respective treatment program. using Knee injury and Osteoarthritis Outcome Score (KOOS), Perceived Stress Scale Visual Analogue Scale for Pain Intensity (PI) and Stiffness Index (SI). Also Physiological measures of Blood Pressure, Heart Rate, Lung Capacity using Bhramari Time (BHT) and anthropometric measures such as Body Weight and Body Mass Index (BMI) were assessed. Data was found to be normally distributed, so paired T tests and one way ANOVA were used for within and between groups comparison, respectively, using SPSS version 10.0.

Results: Within group comparison showed significant improvement in all the variables except BP whereas between group comparison showed significant improvement in yoga group as compared to yoga + naturopathy group for KOOS subscale - Sports function and recreation ($P=0.049$; $f=3.24$) and for HR ($P=0.025$, $f=4.014$) in yoga group as compared to yoga + Ayurveda group.

Conclusion: Though addition of Ayurveda and Naturopathy to Yoga Therapy for short term did not yield significant results but was found to be feasible and safe. Current study also

suggests Yoga as monotherapy to be as effective as other CAM therapies in the treatment of Osteoarthritis in a short-term residential set up. Seven days Yoga Therapy improves clinical symptoms, anthropometric measures and psychological states of individuals with Knee Osteoarthritis

Key words: Knee Osteoarthritis, Yoga, Ayurveda, Naturopathy, Integrative Therapies