**ABSTRACT**

**Objective:** The intended research work aims to evaluate the effect of 12 week Ujjayi pranayama on Hypothyroidism in adults and to compare the changes in BMI and Thyroid Function Test [Tri- iodothyronine T3, Thyroxine T4, Thyroid-stimulating hormone] before and after Psychic breathing technique. Many studies reported that the practice of yoga, especially pranayama influences BMI. The current study was conducted to determine the effect of practicing Ujjayi Pranayama on Hypothyroidism in Adults, followed by monitoring BMI and Thyroid Function Test.

**Study Design:**

The current research work employed A Randomized Controlled Trail.

**Method:**

Potential subject will be screened and eligible patients will be recruited for the study. A minimum of 60 participants in Study group and minimum of 60 participants in Control group belonging within the age group of 18-55 participate in the study. After obtaining informed consent both the group will be subjected to general measures like BMI, Thyroid Function Test before and after the study. The study Group will be subjected to Ujjayi Pranayama for 15 minutes twice a day for 6 days a week for 12 weeks.
Result:

Results of the pre and post measurements on T3, T4, TSH, Body weight and BMI among Ujjai pranayama along with standard drug group for a period of 90 days shows that Body weight was reduced and T3 got raised statistically significant after the yoga intervention where as T4 doesn’t show’s any statistical significance after the yoga intervention. Even though in yoga intervention group T4 doesn’t show statistical significance its mean value raised to a marked level from 8.05 to 8.54 mg/dl .This shows that ujjai pranayama is influencing the T4 secretion. TSH level reduced significantly after the practice of ujjai pranayama for a period of 90 days.

Conclusion:

This study showed that 90 days of Ujjayi Pranayama reduced Body mass index and Thyroid Stimulating Hormone (TSH), Triiodothyronine (T3 ) and no significant differences in Thyroxine (T4) hypothyroid patients. This revealed that yoga practice has significant role in improvement in the weight reduction. Further research need in this field with a larger sample size and duration is warranted to reveal accurate changes in this field.

Keywords:
Hypothyroidism, Ujjayi Pranayama, Basal Metabolic Index, Thyroid Stimulating Hormone,