

VOLUME 9 (SPECIAL ISSUE 2) 2023

ISSN 2454 – 3055

**Manuscripts under Special Issue are published under the
theme “Yoga Practices and Alternative Therapies on
Human Health”**

Guest Editor: Dr. S. Mohanasundaram

Assistant Guest Editors: Mrs. K. Geetha

Mrs. M. Pennarasi

**INTERNATIONAL
JOURNAL OF
ZOOLOGICAL
INVESTIGATIONS**

***Forum for Biological and Environmental
Sciences***

Published by Saran Publications, India



International Journal of Zoological Investigations

Contents available at Journals Home Page: www.ijzi.net

Editor-in-Chief: Prof. Ajai Kumar Srivastav

Published by: Saran Publications, Gorakhpur, India



ISSN: 2454-3055

Analytical Study of Effects of Sodhan Kriyas of Yoga and Ayurveda

Arya Sheetal

Department of Health & Wellness, Sri Sri University, Cuttack, Odisha, India

Received: 17th March, 2023; **Accepted:** 5th May, 2023; **Published online:** 2nd August, 2023

<https://doi.org/10.33745/ijzi.2023.v09ispl2.029>

Abstract: Hatha yoga has a section that explains shat karma. It is a science that is both incredibly exact and very methodical. Samshodhana cikitsa, often known as "bio cleaning therapy," and Samsaman cikitsa are the two primary components that make up an Ayurveda treatment (pacifying therapy). Purification practises, also known as sodhana kriyas, found in Yoga and Ayurveda have been shown to be useful in the treatment of chronic diseases. It is possible to make the human body healthy, disease-free, and free of contamination. Panchakarma is a kind of Ayurvedic treatment that is thought to prepare the body for therapies such as Rasayana and Vajikarana, which are considered to be more intense (aphrodisiac).

Keywords: Sodhana Kriyas, Satkarmas, Panchakarma, Yoga, Ayurvedha

Citation: Arya Sheetal: Analytical study of effects of sodhan kriyas of yoga and ayurveda. Intern. J. Zool. Invest. 9(Special Issue 2): 152-156, 2023.

<https://doi.org/10.33745/ijzi.2023.v09ispl2.029>



This is an Open Access Article licensed under a Creative Commons License: Attribution 4.0 International (CC-BY). It allows unrestricted use of articles in any medium, reproduction and distribution by providing adequate credit to the author (s) and the source of publication.

Introduction

The purificatory methods (sodhana kriyas) of Yoga and Ayurveda are effective in the management of chronic diseases such as Chronic cough and cold, Migraine, Sinusitis, Bronchial Asthma, Indigestion, Constipation, Skin diseases, Diabetes, Obesity, Osteoarthritis, Chronic constipation and Eye sight problem (Patwardhan, 2014; Chobe *et al.*, 2022).

1. Sodhana Kriyas in Yoga:

Satkarmas - Shat karma is described under hatha yoga. It is a very precise and systematic science. Shat means 'six' and karma means 'action'; the Satkarmas consist of six groups of purification practices. Dhauti, Basti, Neti, Trataka, Nauli and

Kapalabhati - these are said to be the six purificatory processes (Hatha Yoga Pradipika, 2/22). Performing the Satkarmas like Dhauti, Basti, Neti, Laukiki (Nauli), Trataka and Kapalabhati is essential (Gheranda Samhita 1/12).

Astakarma - In Hatha Ratnavali, Astakarmas have been described such as Cakri, Nauli, Dhauti, Neti, Basti, Gajakarani, Trotana (Trataka) and Kapalabhati (Mastakabhranti). (Hatharatnavali 1/26)

2. Sodhana Kriyas in Ayurveda:

Ayurvedic treatment comprises of two major parts viz. Samshodhana cikitsa (bio cleansing

therapy) and Samsaman cikitsa (pacifying therapy). Samsaman cikitsa consists of conservative treatment like langhana (fasting), pacana (digestive), drug administration etc. Samsodhana cikitsa includes Panchakarma treatment which is basically a bio-cleansing regimen intended to eliminate the toxic elements from the body and thereby enhances the immunity of the body. Description of these five procedures is available in Caraka Samhita Kalpa - Sthana, Susruta Samhita - Cikitsa Sthana and Ashtanga Hridaya - Sutra Sthana.

The end result of purificatory methods (sodhana kriyas) in Yoga and Ayurveda are to purify the toxins from the body resulting in balanced state of Dosas (bodily humors), Dhatus (tissues) Agni (digestive capacity) and Malas (natural urges) and keeping the Atma (Self), Indriyas (sense organs) and Mana (mind) in blissful state (Dhungan *et al.*, 2021; Chobe *et al.*, 2022).

Clinical Study:

Type of Study - Comparative clinical study (Clinical trial and Comparative study).

Place of Study - Divine Life Holistic Health Centre (DLHC), Basudev Complex, In front of Gauri Sankar Park, Choudhary Bazar, Cuttack, Odisha, India.

Materials and Methods

Methods of Comparative clinical study -

1. Answering the Questionnaire.
2. Direct clinical examination

Study Design - The present clinical research work has been designed in the following manner. 40 patients were selected by multiphase random sampling method and divided into 2 groups - Panchakarma Group (PG) and Shatkarma Group (SG)

(i) Single Group:

- (1) PG (BT) → PG (AT)
- (2) SG (BT) → SG (AT)

(ii) Double Group (AT): PG → SG.

Sample Design - 40 patients are selected which are divided into 2 groups each having 20 patients.

Panchakarma group (PG) - 20 patients were treated with Panchakarma therapies.

Satkarma group (TG) - 20 patients were treated with Shatkarma therapies.

Duration of treatment - 1 month for both the groups.

Panchakarma Therapies Given - Nasya, Virechana, Basti and Netra Basti (Netra Tarpana).

Satkarma Therapies Given - Neti, Shankha-prakshalana, Basti and Trataka.

Number of patients for each therapy - 5

Diet - Vegetarian diet.

Duration of panchakarma therapies given is as follow:

- (i) Pratimarhsa Nasya - Daily twice in morning and afternoon with Anu taila.
- (ii) Mridu Virechana - Daily twice in morning and evening with a mild laxative medicine: Avipattikara churna (10 g) given after lunch and dinner with luke warm water.
- (iii) Matra Basti (therapeutic enema) - For 4 weeks with 3 days interval at every week with 60 ml Lukewarm Balataila after food onc, daily for one week.
- (iv) Netra Basti (Netra Tarpana) - By Triphalaghrita once in the morning for 28 days.

Duration of shatkarma therapies given is as follow:

- (i) Neti - Daily once in morning for 1 month.
- (ii) Shankhaprakshalana - Weekly once in morning for 1 month.
- (iii) Basti - Weekly once in morning for 1 month.
- (iv) Trataka - Daily once in morning for 1 month.

Therapies Given for Diseases:

- (1) Neti and Nasya - Chronic cough and cold,

Migraine, Sinusitis, Bronchial Asthma.

(2) Shankhaprakshalana and Virechana – Indigestion, Constipation, Skin diseases, Diabetes, Obesity.

(3) Basti – Osteoarthritis, Chronic constipation.

(4) Trataka and Netra Tarpana– Eye sight problem.

Selection Criteria:

Age - Above 20 and below 60 years.

Sex - Both male and female.

Clinical Features -Cases without complications and co-morbidities.

Exclusion Criteria:

Age- Below 20 and above 60 years.

Sex – Both male and female.

Clinical features - Cases with complications and co-morbidities.

Tools of Data Collection:

(i) Clinical observation,

(ii) Semi-structured interview.

Data collection Procedure - Data is collected from the Divine Life Holistic Health Centre (DLHC), Basudev Complex, In front of Gauri Sankar Park, Choudhary Bazar,Cuttack, Odisha.

Data analysis:

(i) Assessment of Patients – After completion of trial period, the clinical improvement was assessed following the subjective and objective sign and symptoms of the diseases.

(ii) Assessment of Result – The improvement of clinical symptoms were examined closely and thoroughly, separated and compared after the trial period.

Marked improvement : > 75%

Moderate improvement : 50 – 75%

Mild improvement : 25 – 50%

Unsatisfactory : < 25%

Statistical Analysis:

In order to prove the effect of purificatory methods of both Ayurveda and Yoga scientifically all the assessment has been statistically analyzed and the derived mean value is shown. In the statistical analysis the mean $\pm$ S.D. of improvement clinical signs and symptoms of PG and SG before treatment has been compared with mean $\pm$ S.D. after treatment. The effect of the purificatory methods on clinical signs and symptoms has been assessed through the Z - test.

Time frame – The duration of study was 1 month.

Clinical Observation and Analysis:

Z - Test on differences in number of clinical signs and symptoms in PG (BT and AT), number of clinical symptoms in SG (BT and AT) and number clinical signs and symptoms across the groups (AT) is done.

$\bar{x}_1$ - Average number of clinical signs and symptoms of patients in PG, after treatment.

$\bar{x}_2$ - Average number of clinical signs and symptoms of patients in PG, before treatment.

n_{x1} and n_{x2} - Number of patients in PG.

$S.D_{x1}$ - Standard deviation (the square root of the means of squared deviations from arithmetic mean) of number of clinical signs and symptoms in PG after treatment.

$S.D_{x2}$ - Standard deviation (the square root of the means of squared deviations from arithmetic mean) of number of clinical signs and symptoms in PG before treatment.

σ (Sigma) = Standard deviation = positive square root of the mean sum of squares of deviations of the variate values from arithmetic mean.

Null Hypothesis:

$H_0: \bar{x}_1 = \bar{x}_2$

i.e., there is no significance difference in average of number of clinical signs and symptoms in PG before and after the treatment.

Alternative Hypothesis: H1:

$$\bar{X}_1 < \bar{X}_2$$

i.e., average of number of clinical signs and symptoms in PG after treatment is smaller than before treatment (Left tailed test).

$$Z = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{S.D X_1^2}{n_{X1}} + \frac{S.D X_2^2}{n_{X2}}}}$$

Results

Figure 1 reveals that calculated value of 'Z' is less than the table value at 5 % level of significance. As calculated value of Z lies within the rejection region, the Null Hypothesis is rejected. It implies the observed difference in number of clinical signs and symptoms is statistically highly significant. Thus average number of clinical signs and symptoms of patients in PG has significantly decreased after treatment.

Left tailed test:

Figure 1 reveals that calculated value of 'Z' is less than the table value at 5 % level of significance. As calculated value of Z lies within the rejection region, the Null Hypothesis is rejected. It implies the observed difference in number of clinical signs and symptoms is statistically significant. Thus reduction in average of number of clinical signs and symptoms in PG after treatment is smaller than same in SG after treatment.

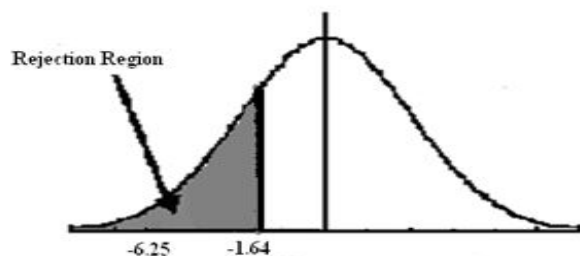


Fig. 1: Calculated Value of "Z" and it's significance

Discussion

In all the disease taken into study, it is observed that PG had moderate improvement and SG had

marked improvement in the clinical sign and symptoms (Umesh *et al.*, 2022).

Both the groups of PG and SG have improvement in the clinical sign and symptoms but marked improvement is seen in SG. Purificatory therapies of Yoga are much more effective than the purificatory therapies of Ayurveda in preventing and curing the diseases like chronic cough and cold, Migraine, Sinusitis, Bronchial Asthma, Indigestion, Skin diseases, Diabetes, Obesity, Osteoarthritis, Constipation, Eye sight problem (Rioux and Howerter, 2019).

In comparison to Ayurvedic Panchakarma therapies, Yogic purificatory therapies are also easy to practice in daily life. These are cost effective and drugless therapies. Therefore, they can be adopted in our daily life. Whereas Ayurvedic Panchakarma therapies are expensive because of use of Ayurvedic medicines. There are many protocols to be strictly followed during treatment. In Panchakarma treatment there are many limitations. Therefore, they cannot be adopted in our daily life (Patwardhan, 2014).

Conclusion

Yoga's Sodhana kriyas are used to purify the body. The human body can be made healthy, disease-free, and uncontaminated. Following that, pranayama and other yoga practises are done. Panchakarma is a kind of Ayurveda therapy that is believed to prepare the body for more severe therapies such as Rasayana and Vajikarana (aphrodisiac). These therapies have a well-established niche in the treatment of nervous system, gastrointestinal, and muscular disorders. In addition, Panchakarma procedures are utilised to preserve and prolong the health and vigour of individuals for the purpose of longevity.

References

- Chobe S, Patra SK, Chobe M and Metri K. (2022) Efficacy of Integrated Yoga and Ayurveda Rasayana on cognitive functions in elderly with mild cognitive impairment: Non-randomized three-arm clinical trial. *J Ayurveda Integr Med.* 13(1):100373.

Dhungana RR, Khatiwoda SR, Gurung Y, Pedišić Ž and de Courten M. (2021) Yoga for hypertensive patients: a study on barriers and facilitators of its implementation in primary care. *Glob Health Action* 14(1): 1952753.

Patwardhan B.(2014) Bridging Ayurveda with evidence-based scientific approaches in medicine. *EPMA J.* 5(1): 19.

Rioux J and Howerter A. (2019) Outcomes from a whole-systems ayurvedic medicine and yoga therapy treatment for obesity pilot study. *J Altern Complement Med.* 25(S1): S124-S137.

Umesh C, Ramakrishna KK, Jasti N, Bhargav H and Varambally S. (2022) Role of Ayurveda and Yoga-based lifestyle in the COVID-19 pandemic - A narrative review. *J Ayurveda Integr Med.* 13(1): 100493.