

A Study of Yogic Therapeutic Intervention on Incontinence of Urine

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Abstract- Urinary incontinence (UI) is a common health condition affecting individuals across different age groups, leading to physical discomfort, psychological distress, and reduced quality of life. While conventional treatments such as medication and surgery are available, they may not always provide satisfactory results and can have side effects. The present study aims to explore the role of yogic practices in the management of urinary incontinence using a descriptive research approach. A total of 30 participants with symptoms of urinary incontinence were selected through purposive sampling. A structured yoga intervention consisting of asanas, pranayama, mudras, bandhas, and relaxation techniques was administered for 12 weeks. Observational data were collected using a structured questionnaire focusing on frequency, severity, and impact on daily activities. The findings indicate a reduction in urinary leakage, improved bladder control, and enhancement in quality of life among participants. The study suggests that yoga may serve as an effective complementary therapy for urinary incontinence.

Keywords— Yoga Therapy, Urinary Incontinence, Descriptive Study, Pelvic Floor, Mula Bandha, Ashwini Mudra

I. INTRODUCTION

Yoga originated in India thousands of years ago, and in this day and age, an alarming awareness of health and natural remedies among people has been observed through yoga and pranayama, which has been proven an effective method for improving health as well as the prevention and management of diseases.

Yogic therapeutic qualities are being investigated as scientific research into the practice grows. Yoga is the science of maintaining a healthy mind in a healthy body and has always been known as a preventive, promotive, and curative therapy. It opens a realm of beatitude and liberation from sorrows and pains for man. The main purpose of yoga is to elevate man and realize his inherent potential. The practice of yoga leads naturally to the modification of thoughts and behaviours and a new realization of the purposes and processes of life. This holistic approach leads to better health and the eradication of physical and mental disorders.

Health is one of the most important aspects of human resource development. Modern society lives with a lot of diseases. The occupation in which he/

she is induced plays an important role in disturbing the normal health of the person. Many diseases pop up due to occupational hazards. One of the common problem is Incontinence of urine. it means the involuntary urination, is an uncontrolled leakage of urine.

Purpose of Study

There is only few studies on incontinence of urine in the area of yoga and yoga therapy. The majority in the field of Medical, Ayurveda, Homeopathy and Surgical based research on incontinence of urine. Therefore a new experiment to study yoga therapy effect on incontinence of urine.

Importance of Study

According to multiple global health studies, including those by the World Health Organization (WHO), urinary incontinence affects over 400 million people worldwide, with a growing prevalence in India, especially among the elderly and women. Studies report that up to 20–30% of adult women and 10% of men may experience urinary incontinence at some point in their lives. The condition severely impacts quality of life, leading to social stigma, emotional distress, and reduced physical mobility.

Urinary incontinence is significantly underreported due to shame and lack of awareness, which delays diagnosis and management. Occupations that involve physical strain, aging populations, lifestyle habits, obesity, and childbirth-related trauma are major contributing factors. In women, especially, hormonal changes and pelvic floor dysfunction make them more vulnerable. Despite the high prevalence, effective non-pharmacological and preventive approaches are limited. The present research aims to develop a yogic lifestyle model to help manage and reduce urinary incontinence naturally. This study also explores the classical yogic and Ayurvedic texts, subject-related books, research articles, and modern medical literature to rediscover ancient practices that can be applied in a modern therapeutic context.

In essence, this project is a step toward a drug-free and holistic management system for urinary incontinence. It proposes a safe, accessible, and side-effect-free yogic approach that may be practiced by the general population. To validate the therapeutic efficacy and safety of these yogic practices, it is crucial to align the research with internationally accepted scientific standards. By considering the above elements, yogic practices can serve as a cost-effective and sustainable therapy for individuals suffering from urinary incontinence, ultimately improving their physical, mental, and emotional well-being.

Objectives

- To evaluate the effectiveness of yogic practices in reducing the symptoms of urinary incontinence and improving bladder control.
- To strengthen pelvic floor muscles through specific yogic techniques (e.g., Mula Bandha, Ashwini Mudra).
- To improve neuromuscular coordination of the urinary system.
- To reduce the frequency and urgency of involuntary urine leakage.
- To enhance autonomic nervous system balance through pranayama and meditation.
- To improve psychological well-being by reducing stress, anxiety, and embarrassment associated with incontinence.

- To promote holistic health and quality of life in affected individuals.
- To assess the role of yoga as a complementary and non-pharmacological therapy.

II. CONCEPT OF INCONTINENCE OF URINE

Urinary incontinence is the involuntary leakage of urine. This condition is prevalent in older adults but can also affect younger adults and significantly impacts both health and quality of life. The 5 main types include stress, urge, mixed, overflow, and functional incontinence. Possible treatments include lifestyle adjustments, physical therapy, pelvic floor exercises, fluid management strategies, prompted voiding, biofeedback, catheters (intermittent or permanent), pads, pharmaceuticals, botulinum toxin injections, sacral neuro-modulation, bedside suction devices, and numerous procedures, including male and female slings, artificial sphincters, and prostate surgery.

This activity reviews the different types of urinary incontinence, effective screening practices, and evidence-based management strategies. Participants gain comprehensive knowledge of the latest diagnostic techniques and treatment modalities, enabling them to provide improved patient care. Clinicians also learn about the psychosocial aspects of the condition and how to address them, enhancing their ability to support patients holistically. This activity also highlights the role of the inter professional team in the care of patients with urinary incontinence, leading to better clinical outcomes and improved quality of life for individuals affected by urinary incontinence. Urinary incontinence, the involuntary loss of urine, is a highly Prevalent condition in older people aged 60 years and over. The common types of urinary incontinence in older people are Stress incontinence and urge incontinence. Stress incontinence is the involuntary leaking of urine during efforts or exertion, or while Sneezing or coughing. Urge incontinence, or overactive bladder Syndrome, involves a constellation of symptoms including Frequency, urgency and leakage immediately preceded by urgency. The prevalence of urinary

incontinence reported in populationBased studies ranges from 9.9% to 36.1%, and is twice as high in older women as in older men. Urinary incontinence has a Profound impact on the quality of life of older people, their subjective health status, levels of depression and need for care.

Several chronic conditions and environmental factors increase the risk of urinary incontinence in older people. Chronic diseases that are associated with urinary incontinence include diabetes Mellitus, Parkinson's disease, dementia, stroke, prostatic cancer, Chronic obstructive pulmonary disease (COPD) and arthritis. Environmental factors such as inaccessible or unsafe toilet facilities, and the absence of caregivers for toileting assistance are also associated with urinary incontinence. Non-Pharmacological interventions are mostly preferred and remain the mainstay of urinary incontinence management for patients with mild urinary incontinence. The primary goal of urinary incontinence interventions is to improve continence by reducing the frequency of urinary incontinence episodes. The non-Pharmacological interventions addressed in this guideline include Pelvic floor muscle training (PFMT), bladder training and habit Retraining, and timed or prompted voiding. There are five main types: stress, urge, mixed, overflow, and functional incontinence. Causes vary from weak pelvic muscles and bladder dysfunction to neurological conditions and lifestyle factors.

Preventing urinary incontinence

It's not always possible to prevent urinary incontinence, but there are some steps you can take that may help reduce the chance of it happening.

- Maintaining a healthy weight.
- Changing your drinking habits.
- Including cutting down on alcohol.
- Doing pelvic floor muscle exercises.

III. DIAGNOSIS OF INCONTINENCE OF URINE

The General practitioner (GP) can diagnose the type of urinary incontinence if have this problem becomes Urinary incontinence is a common problem and it's likely the GP has seen many people with the same

problem.GP will ask you questions about your symptoms and medical history, including:

- whether the urinary incontinence happens when you cough or laugh
- whether you need the toilet frequently during the day or night
- whether you have any difficulty passing urine when you go to the toilet
- whether you're currently taking any medicine
- how much fluid, alcohol or caffeine you drink

Bladder Diary

The GP may suggest that you keep a diary of your bladder habits for at least 3 days so you can give them as much information as possible about your condition. This should include :

- how much fluid you drink
- the types of fluid you drink
- how often you need to pass urine
- the amount of urine you pass
- how many episodes of incontinence you have
- how many times you experience an urgent need to go to the toilet
- Tests and examination

Physical Examination

A GP may examine you to assess the health of your urinary system. If you have a vagina, the GP will do a pelvic examination, which usually involves undressing from the waist down. You may be asked to cough to see if any urine leaks.

- The GP may also examine your vagina to check for causes of incontinence, such as prolapse where part of the bladder bulges into the vagina.
- The GP may place their finger inside your vagina and ask you to squeeze your pelvic floor muscles.
- These are the muscles that surround your bladder and urethra (the tube that urine passes through to leave your body). Damage to your pelvic floor muscles can lead to urinary incontinence.
- If you have a penis, the GP may check the health of your prostate gland, which is located between the penis and bladder and surrounds the urethra.

- You may need a digital rectal examination. This will involve the GP inserting their finger into your bottom so they can feel your prostate gland.
- If you have an enlarged prostate gland, it can cause symptoms of urinary incontinence, such as a frequent need to urinate

IV. MATERIALS AND METHODOLOGY

Research Design

The present study adopts an experimental research design to systematically evaluate the therapeutic effect of yoga therapy on urinary incontinence. It primarily focuses on assessing clinical outcomes among participants undergoing a structured and supervised yogic intervention. This design enables a direct observation of changes in the condition before and after the implementation of the yoga therapy program, thereby establishing its potential effectiveness.

Type of Study

This investigation is an experimental study involving participants clinically diagnosed with urinary incontinence. All selected participants were subjected to a uniform yoga therapy protocol, and their outcomes were measured at two stages prior to the intervention and after the completion of the program. This pre – post assessment approach facilitates a clear understanding of the impact of yogic practices on urinary control and related symptoms.

Sampling Method and Participant Selection

A purposive sampling technique was employed to select a total of 30 participants experiencing urinary incontinence. Participants were recruited from the community based on their willingness to participate and their ability to perform the prescribed yogic practices. The study included individuals who were experiencing symptoms of urinary incontinence, were motivated to engage in the yoga program, and met the required symptomatic conditions. Participants with severe illness or conditions that could restrict yoga practice were excluded from the study. Additionally, individuals undergoing other medical or surgical treatments for urinary incontinence were not considered, ensuring

uniformity in the intervention. All 30 participants were included in a single experimental group and received the yoga therapy intervention under the direct supervision of the researcher.

Sample Size Determination

The sample size for the present study was fixed at 30 participants, considering feasibility, availability of suitable subjects during the study period, and the scope of the research work. The study was conducted using a single-group experimental design without a control group, allowing focused evaluation of the outcomes following the yoga therapy intervention.

Yoga Interventions

The intervention in this study was designed on the basis of the Panchakosha model, which describes the five sheaths of human existence ; Annamaya, Pranamaya, Manomaya, Vijnanamaya, and Anandamaya kosha. The yoga therapy practices were selected to bring balance at each level, thereby addressing urinary incontinence holistically.

- Annamaya Kosha – Physical Sheath ; Asanas, Mudras and Kriyas Practices
- Pranamaya Kosha – Vital Energy ; Pranayama Practices
- Manomaya Kosha – Mental Sheath ; Meditation Practice (MSRT, A-U-M, etc.,)
- Vijnanamaya Kosha – Intellectual Sheath ; Awareness Practices (Body-Mind, Breathing, etc.,)
- Anandmaya Kosha – Blissful Sheath ; Practices to improve Holistic Health and Wealth like, Yoga Nidra, Om Chanting, etc.,

Urinary incontinence, characterized by the involuntary leakage of urine, is a common yet often underreported condition that significantly affects the physical, psychological, and social well-being of individuals. Conventional management approaches include pharmacological and surgical interventions; however, these methods may not always provide complete relief and can be associated with side effects or recurrence. In recent years, there has been growing interest in complementary and alternative therapies, particularly yoga, due to its holistic approach to health. Yogic practices aim to

strengthen the pelvic floor muscles, regulate autonomic functions, and improve mind-body coordination, which are essential factors in the management of urinary incontinence.

Therefore, An ancient Yoga texts such as the Hatha Yoga Pradipika and Gheranda Samhita, composed thousands of years ago, describe lower body disorders and their management through yogic practices.

According to HYP, Importance of controlling ApanaVayu. Mudras like Ashwini Mudra, MulaBandha, Uddiyana-Bandha to tone pelvic muscles. Incontinence seen as energy leakage; yogic control as remedy. Incontinence is due to weak control of Apāna Vāyu. Strengthening MūlaBandha and AśvinīMudrā can control involuntary urination. "Apānamūrdhvagaṃkṛtvāprāṇammadhyamagaccha ti | Yogināmjayarūpeṇamudrābhyaśyabhidhiyate ||" (HYP 3.65)

By moving Apāna upward and joining it with Prāṇa, the yogi achieves success through the practice of Mudras.

- MūlaBandha – Pelvic floor engagement
- AśvinīMudrā – Anal contraction and release
- UḍḍiyānaBandha – Abdominal lift to tone pelvic organs According to Gheranda Samhita, "Ādhārasthānaṃsaṃyamamūlabandho hi kīrtitaḥ | Tenavāyumuṇigārṇhātijārayetkuṇḍaliṃśanaiḥ ||" (GS 3.60)

The restraint at the base (perineum) is called MulaBandha. By this, the vital wind (ApānaVāyu) is controlled and gradually awakens Kundalini.

Ashvinī-Mudrā– Horse Gesture (Anal Contraction)Verse (3.75):

"Yathāśvaḥprakṛṣyenacoditaḥkampatebalāt | Tathāguhyāddhṛtīrbhūyoaśvinīmudrāprakīrtitā ||"

Just as a horse flutters its anal region when goaded, similarly contracting and relaxing the anal sphincter repeatedly is called Ashvinī Mudrā.

Mahā Mudrā – The Great GestureVerse (3.4):

"Padmāsanesthitāyuktākṛtvāmahāmudraṃsudhīḥ | Prāṇamcaivaapānaṃ ca yojayetkāyasaṃyamaḥ ||"

The wise seated in Padmasana, having performed Mahamudra, should unite Prana and Apana through body control.

These classical references indicate that ancient yogic sages recognized the importance of regulating lower body functions through specific practices. Techniques such as Ashwini Mudra, Mula Bandha, and other pelvic-focused yogic exercises help in toning the pelvic musculature, improving neuromuscular coordination, and restoring functional balance.

The present study adopts an integrated yoga therapy module consisting of breathing exercises, loosening practices, yogasanas, pranayama, mudras, bandhas, and kriyas. These practices are systematically designed to enhance muscular tone, improve circulation, and promote neuromuscular control of the urinary system. Techniques such as hands stretch breathing, tiger breathing, and ankle stretch breathing help in synchronizing breath with movement, while loosening exercises improve flexibility and reduce muscular stiffness. Selected asanas including Shashankasana, Baddha Konasana, Setubandhasana, and Malasana specifically target the pelvic region, aiding in strengthening and functional improvement. Furthermore, pranayama practices such as Nadi Shodhana, Ujjayi, and Bhramari facilitate autonomic balance and mental relaxation, which are crucial in reducing stress-induced urinary symptoms. The incorporation of mudras and bandhas, particularly Ashwini Mudra and Moolabandha, plays a vital role in toning the pelvic floor muscles and enhancing sphincter control. Kriyas like Nauli contribute to abdominal strength and internal organ stimulation. By integrating these practices into a structured routine, yoga therapy offers a non-invasive, cost-effective, and holistic intervention for managing urinary incontinence, thereby improving overall quality of life. Thus, the integration of these traditional practices into modern therapeutic approaches provides a strong theoretical and practical foundation for managing conditions like urinary incontinence in a holistic and effective manner.

V. RESULTS

A total of 30 patients diagnosed with urinary incontinence were included in this study. Participants both male and female subjects were represented. All patients underwent a structured yoga therapy protocol, consisting of selected Asanas, Pranayamas, Kriyas, Bandhas, and Mudras. The intervention period was standardized to 12 weeks, with supervised practice sessions conducted regularly.

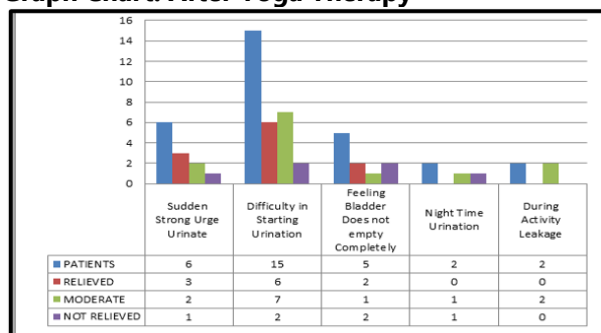
The evaluation of outcomes was carried out through:

- Structured Questionnaires – recording frequency, severity, and impact of urinary leakage on daily activities.
- Oral Discussion/Interviews – assessing patient perception of bladder control, confidence, and overall quality of life.
- Comparative Symptom Analysis – before and after therapy, using standard scoring method frequency chart.

Table 1: After Yoga Therapy for Incontinence Urine

Symptoms	Patients	Relieved	Moderate	Not Relieved
Sudden Strong Urge Urinate	6	3	2	1
Difficulty in Starting Urination	15	6	7	2
Feeling Bladder Does not empty Completely	5	2	1	2
Night Time Urination	2	0	1	1
During Activity Leakage	2	0	2	0

Graph Chart: After Yoga Therapy



The present study was conducted on 30 patients diagnosed with urinary incontinence in order to evaluate the effect of yoga therapy. The assessment was carried out before and after the intervention using symptoms. The findings are summarized and graphically represented.

A total of 30 patients suffering from urinary incontinence were treated with specific Yoga Therapy practices, which included selected Āsanās, Prāṇāyāmas, Bandhas, and Kriyās. The outcomes were assessed based on changes in symptoms such as sudden strong urge to urinate, difficulty in starting urination, feeling that the bladder does not empty completely, night-time urination, and leakage during activity.

Out of 30 patients treated with Yoga Therapy for urinary incontinence, 11 patients (36.6%) were completely relieved, 13 patients (43.3%) showed moderate relief, and 6 patients (20%) were not relieved. Overall, 80% of patients showed improvement after Yoga Therapy, indicating its effectiveness in reducing urinary incontinence symptoms and improving bladder control.

Statistical Analysis

After the collection and presentation of the patient's data, analysis is an important step in research methodology. The observations and results are analysed basing on statistical methods and calculation. As the sample size is 30, obtained data is subjected to paired "t-test". This test is applied to paired data of independent observations from one sample only when each individual gives a pair of observations. Here the importance of causation in yoga therapy is evaluated before and after the yoga therapy.

First, null hypothesis is assumed, i.e. it is assumed that there is no real difference between the means of before treatment and after treatment observations.

Inference

The result obtained is more than table value. so the result is highly significant. So null hypothesis is rejected and alternate hypothesis is accepted. Hence

there is no doubt that yoga therapy has significant effect in the treating various anxiety disorders.

VI. DISCUSSION

The findings suggest that yogic practices play a beneficial role in managing urinary incontinence. Practices such as Mula Bandha and Ashwini Mudra help strengthen pelvic floor muscles, which are essential for bladder control. Pranayama techniques contribute to calming the nervous system and reducing stress, which may influence bladder function.

From a yogic perspective, regulation of Apana Vayu is essential for proper functioning of the lower abdominal region. Thus, yoga provides both physical and subtle benefits.

VII. CONCLUSION

Yoga is an effective complementary therapy for urinary incontinence.

Based on a review of the data gathered, the current study may Conclude that the effect of yoga therapy on incontinence of urine. Is Effectively assessed using a questionnaire and Symptoms. This research Indicate that yoga is more successful therapeutic approach for managing Incontinence of urine. Yoga has the potential to help patients manage their Condition and improve their quality of life. As observed in the study, patient Experienced varying levels of improvement- relieved, moderate and no Effect Following Yoga therapy.

Here, the study's findings demonstrate that Symptoms can be utilized To diagnose incontinence of urine. The findings might promote and facilitate Additional scientific investigation so that yoga therapy methods might be Standardized. Because the improvement will be measured, yoga therapy will have an advantage over other traditional treatment techniques.

For a better understanding of the findings, more subjects may be Added to future research. All the participants in this study were outpatients, And it is

possible to achieve superior results by incorporating the science of Yoga holistically into an patient setting where one can regulate the diet and Way of life that is a component of yoga.

Limitations

Small sample size and descriptive nature.

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