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Prevention of Knee Arthritis Association with Selected Specific Yoga Asanas

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Abstract

The purpose of this study was prevention of knee arthritis relation with specific yoga Asanas 150 female and the range of age 40-45 years were selected from Yoga Consciousness Trust - Seethammadhara, Patanjali Yoga Kendra-Akkayyapalem and Lotus Yoga Center - M.V.P.Colony yoga practicing centres in Visakhapatnam, Andhra Pradesh on non-randomly by purposive sample was used. Karl Pearson coefficient of correlation was used to Analysis of the collected data on specific yoga Asanas were Surya Namaskars (0.585*), Parvatasan (0.339*), Tadasana (0.462*), Veerabhadrasana (0.371*), Trikonasana (0.379*), Vajrasana (0.299*), Gomukhasana (0.573*), Pavana mukthasana (0.565*), (0.364*) Uttitha Parsva Konasan (0.259*) and Bhadrasana (0.289*) coefficient of correlation with prevention of Knee Arthritis had been positively with significant level 0.05. Remaining yoga Asanas did not correlate on this current study.

Key words: Yoga, Asana, Arthritis, Knee-Arthritis, Prevention

INTRODUCTION

Yoga is essentially a spiritual discipline based on an extremely subtle science, which focuses on bringing harmony between mind and body. It is an art and science of healthy living. The word 'Yoga' is derived from the Sanskrit root 'Yuj', meaning 'to join' or 'to yoke' or 'to unite'. As per Yogic scriptures the practice of Yoga leads to the union of individual consciousness with that of the Universal Consciousness, indicating a perfect harmony between the mind and body, Man & Nature. According to modern scientists, everything in the universe is just a manifestation of the same quantum firmament. One who experiences this oneness of existence is said to be in yoga, and is termed as a yogi, having attained to a state of freedom referred to as mukti, nirvana or moksha. Thus the aim of Yoga is Self-realization, to overcome all kinds of sufferings leading to 'the state of liberation' (Moksha) or 'freedom' (Kaivalya). Living with freedom in all walks of life, health and harmony shall be the main objectives of Yoga practice."Yoga" also refers to an inner science comprising of a variety of methods through which human beings can realize this union and achieve mastery over their destiny. Yoga, being widely considered as an 'immortal cultural outcome' of Indus Saraswathi Valley civilization – dating back to 2700 B.C., has proved itself catering to both material and spiritual upliftment of humanity. Basic humane values are the very identity of Yoga Sadhana.

Arthritis is an inflammation of the joints. It can affect one joint or multiple joints. There are more than 100 different types of arthritis, with different causes. Three of the most common types are osteoarthritis (OA) and rheumatoid arthritis (RA) and Gouty arthritis (GA). The symptoms of arthritis usually develop over time, but they may also appear suddenly. Arthritis is most commonly seen in adults over the age of 65, but it can also develop in children, teens, and younger adults. Arthritis is more common in women than men and in people who are overweight, joint pain, stiffness, and swelling are the most common symptoms of arthritis. Your range of

motion may also decrease, and you may experience redness of the skin around the joint. Many people with arthritis notice their symptoms are worse in the morning. In the case of RA, you may feel tired or experience a loss of appetite due to the inflammation the immune system's activity causes. You may also become anemic meaning your red blood cell count decreases or have a slight fever. Severe RA can cause joint deformity if left untreated. Present days, Yoga Education is being imparted by many eminent Yoga Institutions, Yoga Colleges, Yoga Universities, Yoga Departments in the Universities, Naturopathy colleges and Private trusts & societies. Many Yoga Clinics, Yoga Therapy and Training Centers, Preventive Health Care Units of Yoga, Yoga Research Centers etc. have been established in Hospitals, Dispensaries. Now-a-days, millions and millions of people across the globe have benefitted by the practice of Yoga which has been preserved and promoted by the great eminent Yoga Masters from ancient time to this date. The practice of Yoga is blossoming, and growing more vibrant every day. The present study therefore aims to study the relationship of Specific Yoga Asanas association with Prevention of Knee Arthritis.

METHODOLOGY

Purpose of the Study: This study would be decided the Specific Yoga Asanas relation with Prevention of Knee Arthritis.

Selection of the Subjects: 150 female and the range of age 40-45 years were selected from Yoga Consciousness Trust - Seethammadhara, Patanjali Yoga Kendra – Akkayyapalem and Lotus Yoga Center - M.V.P.Colony yoga practicing centres in Visakhapatnam, Andhra Pradesh on non-randomly by purposive sample was used.

Figure-I
Specific Yoga Asanas

S. No	Specific Yoga Asanas
1	Surya Namaskars
2	Parvatasan
3	Tadasana
4	Veerabdrasana
5	Trikonasana
6	Vajrasana
7	Gomukhasana
8	Pavana Mukthasana
9	Uttitha Parsva Konasan
10	Bhadrasana
11	Vrukshasana
12	Sethubandhasana
13	Sashankasana
14	Marjalasana
15	Natarajasana
16	Ekapadasana
17	Garudasana
18	Padmasana

Collection of the Data and Tools

Primary outcome measure

The data had been collected by administrating the standard procedures for taking KA symptoms including pain, stiffness, and physical function were measured using the 24-item Western Ontario and McMaster Universities KA Index scale (LK scale 3.1) (WOMAC). Each symptom is measured using a 5-point Likert scale where 0 represents having no symptom and 4 represents having a severe symptom. KA pain was also measured using the Visual Analog Scale, and a single question that asked participants to record the average number of pain medications (prescription and over-the-counter) they used for knee KA per day.

Secondary outcome measures

Physical performance of the lower extremities was assessed using the Short Physical Performance Battery (SPPB) which consists of three components: repeated chair stands, balance, and timed 8 foot walk. Categorical scores (range 0–4) for the 8 foot walk and chair stands were based on timed. Walking speed was timed using the 50 foot walk test.

Statistical Analysis and Discussions

In order to find out the relationship of specific Yoga Asanas with prevention of knee arthritis the Karl Pearson coefficient of correlation had been used and testing the Hypothesis the level of confidence is 0.05.

Figure-II
Specific Yoga Asanas Association with Prevention of Knee Arthritis

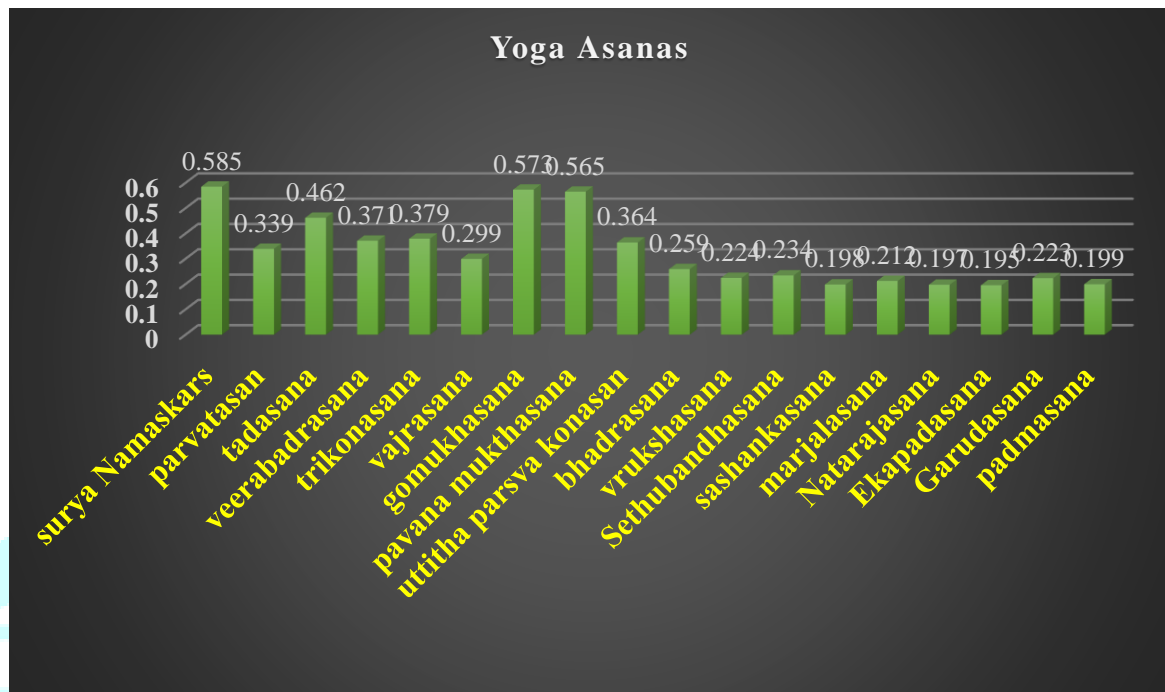
S. No	Specific Yoga Asanas	Coefficient of Correlation 'r'
1	Surya Namaskars	0.585*
2	Parvatasan	0.339*
3	Tadasana	0.462*
4	Veerabardrasana	0.371*
5	Trikonasana	0.379*
6	Vajrasana	0.299*
7	Gomukhasana	0.573*
8	Pavana Mukthasana	0.565*
9	Uttitha Parsva Konasan	0.364*
10	Bhadrhasana	0.259*
11	Vrukshasana	0.224
12	Sethubandhasana	0.234
13	Sashankasana	0.198
14	Marjalasana	0.212
15	Natarajasana	0.197
16	Ekapadasana	0.195
17	Garudasana	0.223
18	Padmasana	0.199

N=150, r.05 (150) =0.238, *Significant at 0.05 level.

An analysis of the above table reveals that prevention of Knee Arthritis had been significantly related to specific yoga Asanas were Surya Namaskars (0.585*), Parvatasan (0.339*), Tadasana (0.462*), Veerabardrasana (0.371*), Trikonasana (0.379*), Vajrasana (0.299*), Gomukhasana (0.573*), Pavana mukthasana (0.565*), (0.364*) Uttitha Parsva Konasan (0.259*) and Bhadrhasana (0.289*) as obtained values of correlation were greater than the value of $r = 0.238$ the correlation to be significant at 0.05. The remaining yoga Asanas were Vrukshasana, Sethubandhasana, Sashankasana, Marjalasana, Natarajasana, Ekapadasana,

Garudasana, Padmasana as their correlation values are less than the value of $r=0.238$ need for significance at 0.05 level of confidence.

Figure-III
Specific Yoga Asanas Association with Prevention of Knee Arthritis



As for the results finally, the study exposes that Specific Yoga Asanas would be significantly related to prevention of Knee Arthritis were Surya Namaskars (0.585*), Parvatasan (0.339*), Tadasana (0.462*), Veerabdrasana (0.371*), Trikonasana (0.379*), Vajrasana (0.299*), Gomukhasana (0.573*), Pavana mukthasana (0.565*), (0.364*) Uttitha Parsva Konasan (0.259*) and Bhadradasana (0.289*).

As per the analysis, suggestion to the Yoga Trainers/Instructors, Yoga Gurus, Yoga Teachers, Yoga Practioners and Yoga Aspirants to concentrate All Specific Yoga Asanas while before yoga training for prevention of Knee Arthritis. These Asanas have been given strength, flexibility and proper blood circulation to the knee joints also Balance the synovial fluid in the knee joints these are the specific yoga Asanas may be prevented Knee Arthritis.

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