

**A Dissertation On**

**“TO EVALUATE THE EFFECT OF HOT AFFUSION BATH WITH EPSOM  
SALT ON PAIN MANAGEMENT IN OSTEOARTHRITIS OF KNEE”**

Submitted by

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The Institutional Ethical Committee of Government Yoga & Naturopathy Medical College and Hospital, Chennai reviewed and discussed the application for approval of “**TO EVALUATE THE EFFECT OF HOT AFFUSION BATH WITH EPSOM SALT ON PAIN MANAGEMENT IN OSTEOARTHRITIS OF KNEE**”, project work submitted by **Dr. B. PRABHAKARAN**, 3<sup>rd</sup> year M. D. Naturopathy, Post graduate, Government Yoga and Naturopathy Medical College and Hospital, Chennai.

The proposal is **Approved**.

The Institutional Ethical Committee expects to be informed about the progress of the study and adverse drug reactions during the course of the study and any change in the protocol and patient information sheet / informed consent and asks to be provided a copy of the final report.

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**Dr. B. PRABHAKARAN**

## LIST OF ABBREVIATIONS

<b>OA</b>	Osteo Arthritis
<b>HAB</b>	Hot Affusion Bath
<b>NSAIDS</b>	Non-Steroidal Anti-Inflammatory Drugs
<b>OAK</b>	Osteo Arthritis Knee
<b>OR</b>	Odd Ratio
<b>DALY</b>	Disability-Adjusted Life Year
<b>IHD</b>	Ischemic Heart Disease
<b>COPD</b>	Chronic Obstructive Pulmonary Disease
<b>IGFBP</b>	Insulin Like Growth Factor Binding Protein
<b>IGF-1</b>	Insulin Like Growth Factor 1
<b>NOS</b>	Nitric Oxide Synthesis
<b>WOMAC</b>	Western Ontario And McMaster Universities Osteoarthritis Index
<b>K/L</b>	Kellgren- Lawrence
<b>MRI</b>	Magnetic Resonance Imaging Techniques
<b>ACL</b>	Anterior Cruciate Ligament
<b>IL-6,8,1,10</b>	Inter Leukin
<b>TNF</b>	Tumor Necrosis Factor
<b>MetS</b>	Metabolic Syndrome
<b>CI</b>	Confidence Interval
<b>ACR</b>	American College of Rheumatology
<b>VAS</b>	Visual Analogue Scale

## **ABSTRACT**

### **INTRODUCTION:**

Osteoarthritis(OA) is a wear and tear type arthritis. It has two primary processes; breakdown of cartilage in joints and abnormal bony growth formation called Osteophytes. It is a chronic degenerative disease that leads to structural alteration and biochemical changes of synovial membrane and joint capsule. WHO reports worldwide osteoarthritis affects 9.6% of men and 18% of women ages above 60 years and condition will be the fourth leading cause of disability by 2020

**OBJECTIVES:** To assess the effectiveness of hot affusion bath with Epsom salt on knee related symptoms among patients with osteoarthritis of knee.

**STUDY DESIGN:** Quasi experimental study

**METHOD:** 40 study subjects belonging within the age group of 50-65 years, participated in the study. The study participants were instructed treated with Hot affusion bath with Epsom salt, thrice a week alternatively for three weeks. Assessment with WOMAC index and goniometer taken at baseline and after three weeks.

**RESULT:** The study showed the presence of significant reduction of knee related symptoms like pain, stiffness and improve range of motion.

**CONCLUSION :** The study proved that Hot affusion bath with Epsom salt is found to be effective in reduction of knee related symptoms like pain, stiffness among patients with osteoarthritis of knees.

**KEYWORDS:** hot affusion bath, Epsom salt, osteoarthritis of knee, range of motion, pain.

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