

# Musculoskeletal Pain Management by Initiating Self-healing Capacity Through Holistic Siddha Therapy - A Review Report

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## Abstract

Chronic musculoskeletal pain can cause impairment in the bones, muscles, ligaments, tendons, and nerves. Traditionally, pain is managed well by the use of conventional treatments, however, in last few years, integrative medicine including CAM's are getting popular and are widely accepted as new treatment modality around the world for MSDs. Siddha is one such holistic alternative therapy popular in Southern part of India. It is a non-invasive complementary approach to healing and curing and stresses on the relationship between the mind and body. The aim of the article is to stress on Siddha Therapy, as a new treatment modality for musculoskeletal pain and the amalgamation of different approaches utilized by Siddha to treat individuals by highlighting the self-healing capacity of the body.

Siddha believes in initiating body's self-healing capacity by usage of therapeutic manipulation of varmam points where the pranic energy is concentrated as per Siddhars. It incorporates multi-modal integrative approaches of energy medicine including chakra balancing, therapeutic touch, deep tissue pressure therapy, postural corrections, muscular exercises, nutritional and dietary modification, along with mind-body techniques to motivate the self-healing process. This approach treats by addressing the underlying cause of disease and brings relief by regulating the flow of energy which was obstructed due to any cause. The different networks - the nervous system, muscular system and micro-circulation by which the body responds to triggers, helps in getting the body to equilibrium. The uptake of this approach reduces the reliance on conventional medicines and their side effects.

Siddha therapy has proved beneficial in retaining the holistic health by maintaining the physical, mental and moral health of an individual and is unlikely to pose any significant risks. This article will review the holistic and self-healing concept of Siddha system and provide credible scientific evidence wherever available.

**Keywords:** Musculoskeletal Disorders, Siddha Medicine, Multi-modal, Varmam Therapy, Equilibrium

## Abbreviations

**MSD:** Musculoskeletal disorders

**CAM:** Complementary alternative medicine

**NSAID:** non-steroidal anti-inflammatory drugs

**TT:** Therapeutic touch

**PT:** Polarity therapy

## Introduction

Musculoskeletal impairments are prevalent across the globe and are one of the commonest causes of long-term pain and disability, affecting millions of people all over the globe. Chronic musculoskeletal pain leads to impairment in tendons, muscles,

nerves, cartilage, ligaments, and joints expressed by intrinsic pain, inflammation, tingling, numbness and insomnia [1]. Common MSDs mainly low back pain, cervical spondylosis, osteoarthritis and fibromyalgia costs about 27% of the total illness cost worldwide [2]. It is seen one out of every four persons in developed and less developed countries reports chronic musculoskeletal pain with 84.8%, individuals complaining of low back pain as the main ailment [3]. The causes leading to musculoskeletal pain is not always clear, but generally it is triggered by aging, any trauma and injury, obesity, overuse and inflammation [4-6]. 2000-2010 decade was declared by WHO as the Bone and Joint Decade, mainly to understand the increasing burden posed by

musculoskeletal pain and improving the quality of life of people suffering from them [7].

Major musculoskeletal disorders such as arthritis and bone diseases, have no effective and permanent cure and require ongoing management by the use of conventional treatments such as rehabilitation, NSAIDs, and even opioids [8]. Increasing side effects of conventional treatments have led many to opt for integrative medicine including CAM's; which are getting popular and are widely accepted as new treatment modality around the world for MSDs, however, the CAM's might differ according to place and tradition [5, 10]. Few opt for Energy medicine techniques which helps the patient find solace despite challenges [11, 12]. In China, traditional herbal medicine is strongly preferred for musculoskeletal pain management by both clinicians and patients [9]. Similarly, in India, patients suffering from chronic conditions seek alternative therapies pestering self-healing theory like ayurveda, homeopathy, kerala massage, Siddha, mind-body practice, yoga as they are much cost effective and pose no side effects [11, 13].

Siddha therapy, an ancient healing system originating from the Tamil culture in South India, represents a profound understanding of human health and well-being that has traversed millennia [14]. Rooted deeply in Indian tradition and philosophy, Siddha therapy offers a holistic approach to wellness, addressing not only the physical body but also the intricate interplay of mind, spirit, and environment [15]. Dating back 5,000 years, Siddha therapy stands as one of the oldest known systems of therapy globally, with its century old philosophy of self-healing concept deeply intertwined with the philosophical foundations of ancient Indian civilization [15].

Adhering to self-healing concept, Siddha therapy has not only proved beneficial in several diseases/disorders but in retaining the overall health by maintaining the physical, mental and moral health of an individual. Many individuals with acute or recurrent musculoskeletal pain, have found complete restoring of body and mind taking up this approach, optimized by multimodal therapies [16]. Many Siddhars had the sense to visualize the energy disbalances in humans and use to treat with their touch, this pressure motivates healing cells in body, thus relieve the pain, improve circulation, decrease stress, increase relaxation and increase general wellness of people [17].

This article will review the holistic and self-healing concept of Siddha system in cases of musculoskeletal disorders causing pain and provide credible scientific evidence wherever available.

### **Causative Triggers for Musculoskeletal Pain**

On the basis of duration, musculoskeletal pain can be acute or chronic and depending upon location, can be localized or more widespread as in case of Fibromyalgia [4]. In siddha prospective, the muscle tissue that is damaged or tensed is thought to form nodules or knots, also known as myofascial trigger points in modern medicine, causing discomfort, tenderness on physical palpitation [18, 19]. Variety of factors inciting the musculoskeletal pain and can be cause of these knots, including aging, poor posture, injury, overuse, stress, and inflammation. Knots can occur in any muscle, but predominantly found in the neck, shoulders, back, and hip [17].

### **Older Age**

With aging, there is a loss of muscle mass, strength, and function that may result in diminished normal functioning of tissues [11]. The most probable reason is reduction in bone strength, cartilage and ligament elasticity and muscular strength. Modern advancements in medicine has increased the average age globally, indicating in future musculoskeletal pain will become more widespread [20].

### **Trauma and Injury**

One of the most common cause for musculoskeletal pain is from direct or indirect contact with an external force. Examples are whiplash injury, strain, and traumatic fractures, dislocations, and direct blows to the muscle [21]. Studies shows that 23.5% patients developed symptoms for pain just after trauma/injury and 12.3% showed after a span of 5-6 months [1].

### **Posture**

The links between posture and pain are highly complex and controversial, but studies have shown that wrong habit-forming posture, cause the loads on spine to disperse incorrectly, weakening the tissues in the lower back. Wrong posture resulting into neck pain, back pain due to today's sedentary lifestyle is very common [21]. The cause is the intricate network of muscles, discs, and joints in the back are pushed beyond their tolerable limit, causing pain [22].

### **Intense Physical Activity**

Daily working labour and individuals playing sports require intensive work. These physical activities can cause intense stress on muscles and sustained repetitive movements, can lead to development of tissue damage and musculoskeletal pain [23].

### **Obesity**

Obesity is thought to increases mechanical load on lower back, knees and foot, triggering musculoskeletal pain [7]. The results of an analysis done in Germany concluded that there is a strong association between being overweight or obese and low back pain in women compared with men [4]. However, clinically studies have indicated that adipose tissue secretes adipokines that contribute to inflammation and hormones, which may be associated with the musculoskeletal pain [2].

### **Inflammation**

Inflammation plays a critical role in the healing process of all damaged musculoskeletal tissues causing pain. All non-traumatic musculoskeletal pain are age related disorders such as osteoarthritis, osteoporosis causing persistent inflammation to joints [5]. Arthritis causes chronic joint inflammation causing severe pain in knees, low back region. In patients with Fibromyalgia, it has been shown that increased oxidative stress may causes all-over musculoskeletal pain and fatigue [6].

### **Self-Healing Concept**

Human body has an advanced mechanism of self-healing. Recovering from long standing illness and trauma takes time but the body cells have the capacity to rejuvenate and grow again [15]. It's a natural process but various factors which slow down this healing process are our thoughts, feelings and emotions. Hippocrates, the father of medicine, posted the concept of self-healing in medicine dating back to 460 B.C. His opinion

was that every aspect of our body and mind are interrelated to every other aspect of our being and by regular massaging, it's a key to healthy life [13].

Early manuscripts of Siddhars mention the idea of manipulation of the holistic field around the humans that works on self-healing of the body and mind, in the context of acute and recurring musculoskeletal pain, to promote body networks to return to equilibrium and relieve pain [16].

The mode of action in self-healing is a complicated one but the networks thought to participate in the process are Nervous system, microvascular system, muscular relaxation, immune system and psychological disbalance [13]. The disruptions are due to contracted muscles, it constricts the blood flow to affected areas which suggests that use of muscle relaxation technique causes an increased supply of oxygen and nutrients to muscles and encourage muscle regeneration which can help avoid chronic inflammation and relieve pain [24]. Good blood flow has a positive indication of great musculoskeletal health. In case of any injury, area getting good supply of blood heals faster, through cellular response by immune cells like neutrophils, macrophages, tissue regeneration and reduces chronic pain [25].

### **Philosophy of Disease as per Siddha Practice**

According to Siddha philosophy, any disease including musculoskeletal ailment arises from the disruption of the natural balance and harmony within the body [6]. This disruption can result from various factors, including dietary indiscretions, lifestyle imbalances, emotional disturbances, environmental toxins, and genetic predispositions. Siddha therapy views disease not merely as a physical ailment but as a manifestation of deeper imbalances affecting the entire being and so works on core points rather than superficially as in cases of RA and Fibromyalgia [7]. Healing in Siddha therapy involves restoring the natural equilibrium of the doshas, purifying the body of accumulated toxins, and harmonizing the flow of energy through the nadis and chakras [15].

Old siddha text also mentions, the three vital life factors that are, Vaadham, Pittham and Kabam in normal state are in the ratio of 4:2:1 respectively. Any musculoskeletal trauma or injury causing disturbance in this equilibrium results in diseases; prompting the primary aim of Siddha therapy to restore equilibrium within the body through various therapeutic modalities [16, 10]. Few Siddha Philosophers believed that humans are made up of energy and when there is an imbalances and disturbances in the body, mind or spirit, the natural flow of energy is obstructed, disordered, and depleted, the body becomes diseased hence, affects can be shown as chronic musculoskeletal disorders [26]. These disturbances might create "knots" or myofascial trigger points as per the modern science, in their body which could lead to discomfort or diseased conditions [14, 19]. Therefore, the ability to recall and dissolve these knots through mindfulness or conscious awareness aligns with Siddha's holistic approach to health and well-being [14].

In modern times, science has begun to measure the subtle but important energy field in the human body. Siddha therapy too recognizes the presence of subtle energy channels known as nadis, which correspond to the meridians in traditional Chinese therapy [27]. These nadis serve as conduits for the flow of vital

energy, or prana, throughout the body. The three main nadis corresponds to the spinal column and are associated with specific physiological functions and psychic centers, known as chakras. The balance and flow of energy through these nadis and chakras are crucial for maintaining health and vitality in Siddha therapy for a self-healing capacity of body [28].

### **Integrative Approach of Siddha to Self-healing**

The approach of self-healing is a merger of set of body practices, multi-modal integrative techniques applied in siddha for prevention and rehabilitation of manipulating a wide range of physical, and visual diseases in case of musculoskeletal issues. These techniques sensitize the harmonious relation between the body, the mind, the emotions, and balances the organic, physical, psychological functions for holistic healing [13]. Musculoskeletal disorders create a psychological trauma to patients and disrupts the quality of life and mind-body treatment of Siddha helps in balancing both aspects of physical and emotional front well [20, 7].

Texts such as the Siddha Vaidyam and the Thirumandiram have served as guiding lights in this respect, elucidating the fact that utilizing energy therapies in conjugation with siddha, can help restore the whole person to equilibrium in cases of disorders related to pain in cases of knee arthritis and cervical spondylosis [14, 10]. The old texts from Siddhars, documents enhancement of both physical and psychological health of an individual by the incorporation of mind-body approach, and energy medicine technique like therapeutic touch, chakra balancing to prevent disease, and relieve chronic pain [26, 29].

Traditional Siddha practitioners who are trained by their ancestors, harnesses ancient healing methods, primarily the techniques of Nadi Vaidyam and Marma Chikitsa, wherein it is believed that Nadis are energy channels that facilitate the flow of pranic energy throughout the entire body [6]. Varmam therapy is one such Siddha therapeutic pressure therapy which initiates these energy points where the life energy is found concerted and is the choice of treatment in cases of pain management [30]. These energy points or Marmani as per Ayurveda are potent energy points strategically located in the body, rich in nerves and blood vessels and play a crucial role in cellular communication and offers various therapeutic benefits [31]. Handling on these points with a particular force by professional Siddhars for the definite time will release the life energy from these points and fetch relief to the affected individual by regulating the flow of life energy which is blocked due to attack on particular Varmam point or due to other causes [18, 27].

Siddha therapy and Energy medicine technique are patient-practitioner oriented and helps in activating self-healing quality of body. The energy medicine techniques support that human beings are able to influence subtle forms of energy with their hands, intentions, or meditation, like the Siddha practitioners, who are able to feel vibrational frequencies with their hands and aligns the biofield through various healing methods [29]. Conventional Siddha professionals are experts in polarity therapy (PT) and therapeutic touch (TT) and have detected imbalances in body and corrected them. Both have shown good results in pain reduction and increase the quality of life in fibromyalgia patients and improved functional mobility in patients with osteoarthritis and lumbar spondylosis [31].

Numerous studies have demonstrated the physiological and psychological mechanisms involved in holistic healing through Siddha practice including the purification of mind and body through detoxification and dietary changes. Detoxification mechanisms aimed at purifying the body and eliminating accumulated toxins causing distress and releasing pain in auto-immune and several other diseases [30]. This purification process not only cleanses the physical body but also rejuvenates the mind and spirit, paving the way for renewed vitality and healthy state.

Lifestyle factors also receive great emphasis, with dietary recommendations, daily routine alterations, and environmental considerations carefully tailored to support overall well-being of an individual [17]. Yoga and moderate exercises strengthen the muscles, though intense physical activity can initiate musculoskeletal pain, but conversely, moderate physical activity can reduce it [28]. Siddha studies displayed yoga and meditation together on stress reduction and found significant improvements in perceived stress levels and have a profound impact on bodies and minds, affecting the immune system and overall health. Similarly, Siddha therapy also proved beneficial in managing anxiety and depression and found significant reductions in symptom severity [32].

### Empirical Evidence Supporting Siddha Therapy

While Siddha therapy has been practiced for thousands of years, empirical evidence supporting its efficacy has been limited. However, in recent years, there has been a growing interest in scientific research on Siddha therapy, with several studies investigating its therapeutic potential in various health conditions.

One area of research focus has been the use of Siddha therapy in the management of chronic diseases such as arthritis, and autoimmune disease. For example, a randomized controlled trial conducted in Chennai siddha hospital investigated the efficacy of Siddha therapy in the treatment of osteoarthritis where significant improvements in pain, mobility, and quality of life shown in experiment group compared to those in the control group. Furthermore, Siddha pressure therapy using energy medicine has garnered interest for its potential therapeutic benefits in musculoskeletal pain management [27]. A systematic review and meta-analysis conducted at siddha centres examined the effectiveness of Siddha massage therapy in reducing musculoskeletal pain. The review found that Siddha massage therapy through holistic methods gave significant improvements in pain intensity, functional disability, and quality of life compared to control interventions, suggesting its potential as a non-pharmacological approach to pain management [28]. A study investigated the effects of Siddha yoga meditation on stress reduction and found significant improvements in perceived stress levels among participants [33]. Similarly, a randomized controlled trial evaluated the effectiveness of Siddha therapy in managing anxiety and depression and found significant reductions in symptom severity compared to placebo [32].

### Further Research Directions

Self-healing process will continue to evolve over time. The body has an innate ability to self-heal and show improvements if there is use of various integrative modalities, and aids the body to return to its natural equilibrium, helping to relieve pain induced by various triggers. The self-healing concept of Siddha, is a

multi-modal integrative medicine approach for adults with acute or recurrent musculoskeletal pain relating to healing person as a whole. Sufficient guidance and dispersion of proper knowledge, awareness on the approach will all contribute towards the self-healing concept.

Overall, while more research is needed to fully elucidate the mechanisms of action and clinical efficacy of Siddha therapy, the available evidence suggests that it holds promise as a holistic approach to health and healing and adheres to self-healing capacity of body in cases of management of pain. Future studies should focus on exploring the synergistic effects of different Siddha modalities, elucidating the underlying mechanisms of action, and evaluating the long-term outcomes of Siddha interventions in diverse populations having. Limitations to the self-healing approach include a lack of similar models for comparison and the need for more evidence to evaluate the effectiveness of integrative medicine approaches versus conventional therapy. By integrating ancient wisdom with modern science, Siddha therapy has the potential to offer valuable insights and therapeutic solutions for promoting health and well-being in the 21st century and beyond [34-38].

### Conclusion

Siddha therapy stands as a testament to the profound wisdom and holistic understanding of human health that has been passed down through millennia. Rooted in ancient tradition and guided by a profound philosophy of interconnectedness, Siddha therapy offers a comprehensive approach to self-healing capacity and showed results in various musculoskeletal diseases with profound results. Through the integration of physical therapies, mind-body practices, energy practices, detoxification techniques, and lifestyle recommendations, Siddha therapy seeks to restore balance and harmony within the body, thereby reducing pain and promoting optimal health and vitality. While evidences supporting Siddha therapy is still emerging, preliminary studies suggest its potential efficacy in the management of various health conditions. As interest in holistic and integrative approaches to health continues to grow, Siddha therapy stands poised to offer valuable insights and therapeutic modalities for individuals seeking to optimize their well-being and cultivate a deeper connection with themselves and the world around them. With its timeless wisdom and profound healing potential, Siddha therapy remains a beacon of hope and inspiration for all those on the journey toward wellness and wholeness.

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