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## Vyayama to Rehabilitation Protocols: Ancient Indian Exercise Science and the Evolution of Contemporary Physiotherapy

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### Abstract

Indian Knowledge Systems (IKS), including Ayurveda and Yoga, provide a comprehensive understanding of exercise/physical activity, through Vyayama or regulated exercise. Ancient texts such as the Charaka Samhita and Sushruta Samhita, describe Vyayama as a method for an individual to maintain his/her physical strength, metabolic rates and systemic homeostasis as an overarching, preventive strategy. These concepts do have analogues in contemporary rehabilitation sciences that provide individualised exercise programs as well as contact-based recovery and optimising recovery methods. This chapter aims to provide an analysis of the philosophical foundations of Vyayama and its possible therapeutic applications. Some of these applications include the practices of Abhyanga (Oil Massage), Marma Therapy, Yogic Asanas, and Pranayama. Additionally, the chapter intends to explore the history of physiotherapy as a discipline and how new forms of integrative therapies are being developed, particularly those that incorporate indigenous knowledge systems (IKS). There is scientific literature that indicates that integrative therapies are effective in treating and managing various conditions such as musculoskeletal, neurological, cardiorespiratory, and lifestyle disorders. This chapter, through its interface with both traditional wisdom and modern science, seeks to emphasize the importance and relevance of IKS in the context of rehabilitation.

**Keywords:** Vyayama, Knowledge Systems, Ayurveda, Rehabilitation, Physiotherapy, Yoga, Pranayama, Abhyanga, Marma Therapy, Integrative Medicine.

### Introduction

Fusion of traditional/modern scientific knowledge has increased significance in today's healthcare industry. This is particularly evident in rehabilitation science where old principles (movement, healing, holistic wellness) continue to be validated by today's findings through emerging research. The theme of "Tradition & Innovation" is obvious throughout rehabilitation sciences.

Individualized care, controlled physical activity, and lifestyle discipline have been emphasized in Indian knowledge systems (IKS) – especially Ayurveda and yoga—for a long time. Long before physiotherapy had been established as a clinical discipline in the 19th & 20th centuries, classical Ayurvedic texts (e.g., the Charaka Samhita and Sushruta Samhita) recorded structured ways of exercising, using therapeutic movement, massaging, and rehabilitating post-injury. (Sharma & Dash 2018)

The principle behind both preventative and therapeutic health practices denotes the use of Vyayama, which can be described as deliberate/controlled physical movement/work effort and/or effort/non effort. The concept of Vyayama was defined by Sushruta as a physical work effort capable of causing fatigue (Ayasa). Conversely, Acharya Charaka sees the meaning behind Vyayama to signify an activity where, when performed in a suitable manner of time, it promotes stability and efficacy to perform (Sharma, 2001). Both definitions illustrate a well-considered understanding of concepts relating to exercise dosage/modification/and rest cycle which are highly regarded by modern physical therapy.

Most importantly, vyayama was not universally prescribed. It is an early example of personalized medicine and used to be tailored to an individual's Prakriti (constitution), Bala (strength), age, and the season. The concept of Ardha-Shakti (half of one's possible output) shares similarities with current notions of safe thresholds for training and graded exercise.

We've seen that the problems with just using a "cure" to fix health issues are starting to become clearer, especially with all the people developing some type of lifestyle diseases (e.g., diabetes, obesity, heart disease, bones and joint problems). The value of movement-based therapies is increasing in importance for preventative care, functional health care and patient-centred health care (WHO, 2020).

The Vyayama principles are very well correlated to modern day physiotherapy in relation to restoring mobility, function, quality of life; early western approaches to physio have typically concentrated on biomechanical correction. Conversely, the IKS approach is a comprehensive model of health/fitness that includes all three of these dimensions - i.e., physiological, psychological and biomechanically. These customs have been further supported by recent scientific findings. Research shows that yoga and pranayama enhance psychological well-being, neuromuscular coordination, metabolic control, and cardiovascular health (Cramer et al., 2014; Ross & Thomas, 2010). In a similar vein, conventional treatments like Marma stimulation and Abhyanga have demonstrated encouraging outcomes in terms of pain relief and functional recuperation.

In order to show how combining traditional knowledge with contemporary evidence-based practices can improve results and redefine the future of physiotherapy, this chapter examines the continuum from ancient Indian exercise science to modern rehabilitation protocols.

## Vyayama's Philosophical Foundations

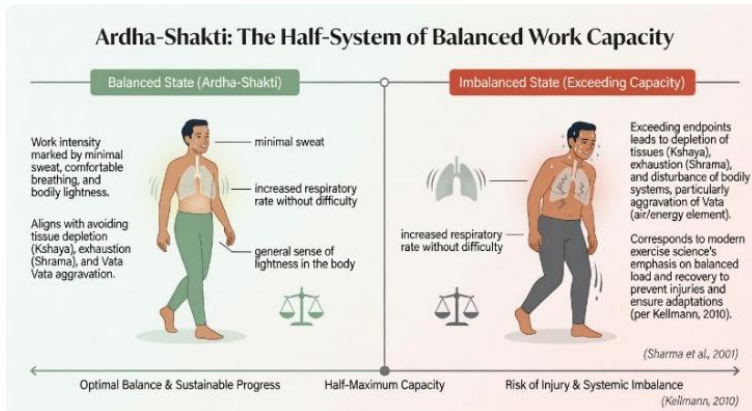
According to Ayurveda, health is a state of dynamic balance between the mind (Manas), consciousness (Atma), and physical body (Sharira). Vyayama, or physical exercise, is considered an essential practice for preserving physiological integrity, improving functional capacity, and fostering systemic balance within this integrative framework. As mentioned earlier, Vyayama as described in Charaka Samhita and Sushruta Samhita refers to controlled, intentional activity that promotes strength (Bala), stability (Sthairya), lightness (Laghava), and metabolic efficiency (Agni) (Sharma, 2001; Sharma & Dash, 2018). These fundamental principles closely resemble contemporary ideas in exercise science and rehabilitation, such as graded loading, customized prescription, and preventive health measures.

- **Customization: Exercise Prescription Based on Prakriti**

The individualization principle, which bases exercise recommendations on a person's Prakriti (constitutional type), Bala (strength), age, and general health status, is a fundamental component of Vyayama. According to Ayurveda, people are categorized into Vata, Pitta, and Kapha constitutions, each of which has unique metabolic and physiological traits. For example, people with a dominant Kapha constitution, which is marked by heaviness and a slower metabolism, are recommended to participate in more demanding and stimulating activities like brisk walking or dynamic yoga sequences (Surya Namaskar). On the other hand, gentle, grounding exercises like slow asanas and controlled breathing techniques are beneficial for Vata-dominant people, who are more prone to exhaustion and instability. This method acknowledges the variability in response to physical training and is in line with the contemporary paradigm of personalized medicine and customized exercise prescription. (Mukherjee et al., 2017).

- **The Ardha-Shakti Principle of Moderation**

Another key concept is "Ardha-Shakti" - the recommendation to work/FULFILL yourself to your "half" maximum capacity (or "half-system" of work capacity). In Ayurvedic literature, examples of adequate work intensity can be described by the presence of "minimal sweat," increased respiratory rate without any difficulty breathing, and a general sense of being light in your body. It is not advised to exceed the above mentioned endpoints because doing so can lead to the depletion of tissues (Kshaya), exhaustion (Shrama), and the disturbance of the systems of the body, mainly the aggravation of the Vata (Sharma et al., 2001), which corresponds to modern day exercise science theories regarding the need for balance between load (stress) and recovery in order to gain adaptations without injuries at every level of exercise (Kellmann, 2010).



**Figure 1: The half system of balanced work capacity**

Author's Imagination

- **Seasonal Adjustment: Ritucharya and Environmental Control**

The significance of seasonal adaptation (Ritucharya) in controlling physical activity is further emphasized by Ayurveda. The type and intensity of exercise are adjusted based on the climate and how it affects the internal environment of the body. For instance, lighter activities are suggested in the summer (Grishma) to avoid fatigue and dehydration, while more strenuous exercise is advised in the winter (Hemanta and Shishira), when physical strength is naturally higher. This idea shows an early comprehension of circadian rhythm alignment and environmental physiology, which contemporary research has connected to immunological response, exercise performance, and metabolic health (Potter et al., 2016).

- **Preventive Approach: Vyayama as Langhana Treatment**

According to the text, Vyayama (exercise) has been classified as a Langhana (lightening or reducing) remedy in Ayurveda. This classification highlights Vyayama's essential role in maintaining metabolic balance and preventing disease through increased level of fitness and more frequent exercise serves to aid digestion and reduce excessive kapha and obesity while enhancing overall vitality. The classical texts clearly state that no treatment is better than Vyayama for the treatment of Santarpanajanya (over-nutritional). (Sharma, 2001)

Current opinions regarding public health recognize that insufficient physical exercise is a key risk factor contributing to the onset of many chronic diseases, such as diabetes, heart disease, or obesity. Research gathered recently has demonstrated that a program of structured physical activity can significantly impact cardiovascular fitness, insulin sensitivity, and overall metabolic health (Booth et al., 2012).

- **Integration with Contemporary Practice**

India is a country of great cultural heritage and each culture has its own traditional practices to begin a day in the right spirit. While most cultures follow a

regime of morning exercise or yoga, some make adjustments in their lifestyle according to the change of seasons while others have traditional system of movement and physical training like Surya Namaskar. Today, this ancient practice of Vyayama is being woven into health programs of educational institutions and are often recommended by our Minister of AYUSH also.

The philosophical base underpinning the discipline of Vyayama provides a previously unknown depth and scope to the concept of 'exercise' from a holistic perspective. These principles can provide healthcare professionals and people with injury or illness a renewed insight to physical activity and rehabilitation, guiding evidence-based practice towards more a more personalised, balanced and longer-term strategy. The application of individualisation, moderation, seasonality and prevention for effective life-long health and fitness can be interpreted in the light of historical philosophies to gain a uniquely scientific and contemporarily relevant eastern perspective on physical activity and rehabilitation.

### **Ancient Practices Relevant to Rehabilitation**

Ancient Indian Knowledge Systems for Rehabilitation include methods of rehabilitation mentioned in Ayurveda and Yoga. These methods include therapeutic exercise, physical Postures / Yoga Asanas, Massage / Abhyanga, Shodhan etc. These systems, described extensively in ancient medical classics like Sushruta Samhita and Charaka Samhita give insight of how rehabilitation to complete functional recovery of body is achieved. Most of these methods are almost corresponding with similar methods practiced currently, like graded exercise, manual therapy, neuromuscular facilitation and psychosomatic regulation, the only difference being that these are practiced with a totally different approach.

- **Therapeutic Movement (Vyayama-based Functional Activity)**

Therapeutic movement is a cornerstone of Ayurvedic health and medical practice. Therapeutic walking (Chankramana), running (Dhavana), and swimming (Plavana) and other related physical activities and exercises were directed by ancient Ayurvedic physicians for both health and therapeutic purposes. Once a patient had fully recovered from an surgical procedure or traumatic injury, he or she would be gently started on a program of mobilization to stimulate healing, enhance nutrition and bio-batteries, and to prevent stiffness. This is detailed in the Sushruta Samhita.

Walking is a simple yet effective means of building endurance and improving digestion and mental clarity. In India, various cultures and traditions engage in morning walks and performing pradakshina (circumambulation) of temples and deities. Early mobilisation, functional training and progressive loading of tissues are key tenets in rehabilitation, as outlined by the World Health Organization (2020).

- **Abhyanga (Medicated Oil Massage)**

Abhyanga is the application of warm medicated oils to the body as an Ayurvedic therapy. It offers great rehabilitative benefits and is often practiced using herbal oils such as sesame oil or specific preparations like Mahanarayana Taila. The oil application is thought to nourish the body tissues (Dhatus), help in circulation, support lymphatic system, and reduce body stiffness. It is specially indicated for Vata imbalance as it calms the body parts and helps to reduce pain.



**Figure 2: Abhyanga Therapy Depiction**

Source – [www.wemystic.com](http://www.wemystic.com)

Abhyanga can be related with Manual Therapy and Soft Tissue Mobilization. Similar to numerous manual therapy and soft tissue mobilization techniques practiced today, Abhyanga increases blood flow, relieves pain, and accelerates healing. There is considerable evidence in the contemporary clinical literature that massage decreases stress, lowers heart rate, and enhances balance of the autonomic nervous system (Field, 2016). Abhyanga is often practiced in combination with various exercises during Panchakarma treatments and is used to treat conditions like osteoarthritis, low back pain, and following injury.

- **Marma Therapy (Vital Point Stimulation)**

Marma therapy involves stimulation of particular parts of the body which are called “Marma” points. Ancient Ayurvedic text describes these points as marma points; they are deemed as vital connections of muscles and tendons, veins and arteries, ligaments, bones and joints. Sushruta Samhita, an ancient Ayurvedic text describes 107 of these vital points and their role in promoting the flow of prana (life force).

Marmas (or marmapoints) can be stimulated by a gentle application of pressure and/or massage to regulate the neuromuscular system of the body, thereby improving circulation and promoting healing of the tissues. The use of marma points has been related to several healings systems including trigger point therapy, acupressure and other neuromodulation methods that are generally utilized in rehabilitation for alleviating pain and facilitating recovery physically.

Some traditional healers and Ayurvedic practitioners continue to use marma therapy as a means of treating patients who are suffering from ailments such as arthritis, cervical spondylosis, and post-stroke rehabilitation. There are a few studies that provide evidence of how marma therapy can impact the body and its nervous system; however more research needs to be done to validate what has been discovered thus far and how effective marma therapy can be.

- **Yoga and Pranayama (Mind-Body Rehabilitation Practices)**

Yoga and Pranayama are a part of the Indian system of health and management of physical disabilities with physical as well as mental connotations. The practice of yogic postures or Asanas is utilized in restoring flexibility and strength, and also in enhancing balance and proprioception. The practice of Tadasana, Bhujangasana and Vrikshasana helps in regaining better posture and in establishing balance in the body.

The practice of pranayama can help calm the busy mind, but it is also an excellent method of balancing the autonomic nervous system by improving how efficiently you breathe, decreasing anxiety levels and promoting overall well-being. In today's class we will discuss Anulom Vilom, Bhramari and Kapalbhathi pranayama and the benefits of increasing your lung capacity, lowering your anxiety level and improving mental health.

More studies have indicated that using yoga as a form of exercise has been effective for improving mental as well as physical health. A systematic review provided moderate to strong evidence (Cramer et al. 2013) of the positive effects of yoga on flexibility, reduced pain, and quality of life among individuals with chronic conditions. In addition, the use of pranayama as a form of breathing has positively benefited the health of the cardiovascular system and the body's ability to manage stress (Jerath et al 2015).

In India, numerous people take part in practicing yoga in diverse environments, such as schools, community organizations and medical facilities. The government's effort to raise public awareness about and promote the International Day of Yoga has resulted in the increased acceptance and use of yoga and its rehabilitative value as a low-cost method of rehabilitation.

There are several ancient Indian rehabilitation systems that have a great deal of sophistication when it comes to using movement, exercise, and other forms of physical modalities for the purpose of rehabilitation from injury or illness. The laws of nature concerning how the body works, as well as how body systems interact or interface with one another, are integral components of therapeutic movement as well as all form of Abhyanga, Marma therapy, and Yoga-Pranayama. With regard to rehabilitation technology from a more modern perspective, each possess the potential for the provision of physical, neurological, and psychological benefit. Treatments may also be preventative in nature. Once integrated into the understanding of these various

systems, ancient forms of rehabilitation may then be integrated into modern health care systems and herbal medicine offers an opportunity to provide alternative modes of rehabilitation based upon the proven success of very ancient therapies and techniques.

### **Evolution of Contemporary Physiotherapy**

Modern physiotherapy, as a healthcare science, has taken shape through a synthesis of historical developments in physical training systems, war rehabilitation, and advances in biomedical sciences. While physiotherapy is generally regarded as a derivative of Western medical science, its underlying principles, such as graded exercise, functional restoration, and recovery optimization, show a striking similarity with concepts described in ancient Indian Knowledge Systems.

- **Early Foundations: Swedish Gymnastics and Therapeutic Exercise**

The origins of physiotherapy are generally regarded as having started with Per Henrik Ling in the early 19th century, who established a system of Swedish gymnastics, which focused on structured physical movements, therapeutic exercises, and manual techniques to enhance physical strength, flexibility, and functional capabilities.

The underlying principles of Swedish gymnastics, such as physical movement, graded exercise, and mechanics of physical activity, show a striking similarity with the concept of Vyayama in Ayurveda, which involves a regulated and individualized pattern of exercise. Similarly, traditional exercises such as Surya Namaskar and Danda-Baithak, which are common in regions such as Maharashtra and North India, show a pattern of physical movement designed to enhance physical capabilities and endurance.

- **Impact of War Rehabilitation Programs**

The rapid growth of physiotherapy as a clinical profession was seen in the early to mid-20th century, particularly in addressing the rehabilitation challenges brought about by the First and Second World Wars. This led to the development of physiotherapy as a professional practice, particularly in addressing rehabilitation, exercise, electrotherapy, and manual therapy interventions (Nicholls & Gibson, 2010).

The rehabilitation strategies developed during these wars, particularly in addressing injuries sustained by soldiers, included early intervention, progressive resistance, and task-oriented exercises, which are also seen in ancient Indian texts on medicine. For example, Sushruta Samhita, an ancient Indian text on medicine, discusses rehabilitation strategies after surgery, such as gradually progressing exercises to improve range of motion and strength, showing an early understanding of rehabilitation progression and tissue healing (Sharma & Dash, 2018).

- **Advances in Biomechanics and Exercise Science**

The latter half of the 20th century witnessed a huge growth in physiotherapy, particularly with advances in biomechanics, kinesiology, neurophysiology, and exercise



science. Physiotherapy has since developed to include evidence-based practices in addressing various musculoskeletal, neurological, cardiopulmonary, and sports injuries. Concepts such as motor control, neuromuscular re-education, and functional training have since been integrated in rehabilitation practices (Hall & Brody, 2019).

Modern physiotherapy has since focused on individual assessment, goal-oriented intervention, and outcome-based interventions, particularly with scientific research and clinical trials to support practice interventions. Techniques such as exercise prescription, gait, and balance rehabilitation have since been widely applied in physiotherapy practices to improve patient outcomes.

- **Parallels with Indian Traditional Practices**

The initial concepts of physiotherapy were seen to have a strong historical basis within the original systems of medicine that existed in the East, especially in Indian medicine. Vyayama is an exercise programme from the Ayurvedic tradition based on principles of activity, adaptation and healing, which approximates modern methods used for exercise prescriptions today. Therapeutic massage called Abhyanga and neuromuscular stimulation called Marma therapy existed during this time as well.

Physical culture within the various regions of the country includes various forms of rehabilitation through indigenous practices. There are examples such as Mallakhamb of Maharashtra which has been used to promote developing the muscular endurance, flexibility and neuromuscular coordination; Kalaripayattu (also a martial art) of Kerala contain therapeutic exercises and techniques to recover from injury, and yoga therapy programs, which are increasingly being used for physiotherapeutic purposes, had been used to treat low back pain, stroke and cardio-pulmonary disorders prior to the introduction of Western rehabilitation ideologies into the country. These examples demonstrate that movement, recovery and wellness have been part of the indigenous physical culture of this country for many years.

- **Integration in Contemporary Healthcare**

More recently there has been a growing awareness about the importance of combining traditional Indian techniques with contemporary physiotherapeutic techniques. Initiatives undertaken by Ministry of AYUSH, as well as research studies have raised awareness about yoga based rehabilitation techniques and the use of breathing techniques in contemporary medicine, and how both have the potential to enhance one's physical recovery from an injury and improve a person's quality of life (Cramer et al., 2014; Telles et al., 2016).

The combination of modern physiotherapy with traditional Indian cultural practices is an example of modern-day medicine's focus on taking a holistic approach to health and wellness through the inclusion of those practices and other aspect of health care at the same time.

Modern physiotherapy evolved from an accumulation of historical developments in exercise science, clinical rehabilitation practices, and biological research. However, the principles that define modern-day physiotherapy, namely recovery and graded exercise, have strong historical ties to the traditional Indian Knowledge Systems. Understanding these historical interconnections helps us understand why physiotherapy is practiced today and provides new opportunities for innovation and improvement in the form of integrative rehabilitation practice.

### **Integrative Applications of Traditional Indian Practices in Rehabilitation**

The integration of traditional Indian practices in modern physiotherapy has resulted in the development of holistic, multimodal rehabilitation techniques. The use of such techniques has shown positive results in the management of physical, neurological, and metabolic disorders. The scientific community has shown increased interest in these techniques, thus validating their use in different aspects of rehabilitation.

- **Musculoskeletal Rehabilitation**

Musculoskeletal disorders such as low back pain, osteoarthritis, and postural dysfunction are among the major causes of disability in the world. The use of yoga-based interventions in combination with traditional physiotherapy techniques has shown significant improvements in pain management, flexibility, strength, and functional abilities. Yogic practices such as Bhujangasana, Setu Bandhasana, and Trikonasana help in improving spinal mobility. Traditional strengthening techniques such as Danda-Baithak, commonly practiced in northern India, help in improving strength in the lower limbs.

Studies have shown that yoga is as effective, if not more so, than traditional exercise therapy in managing chronic low back pain. Such interventions have shown positive results in improving the quality of life of patients. The use of yoga in combination with manual therapy techniques such as soft tissue mobilization or traditional Abhyanga can further help in improving circulation, reducing muscle stiffness, and promoting recovery.

- **Neurological Rehabilitation**

Patients suffering from a neurological disorder such as stroke, Parkinson's disease and imbalance have rehabilitative needs that highlight the importance of encouraging neuroplasticity, developing motor skills, and improving coordination through therapeutic techniques. Research has demonstrated the effectiveness of yoga therapy as an adjunct treatment for enhancing balance, gait and functional mobility. Yoga posture techniques such as Vrikshasana (Tree) and Tadasana (Mountain) can assist with balance and coordination.

According to studies, stroke survivors experienced a significant improvement in mobility and balance as well as improved neuropathy and functional recovery as a result of participating in yoga therapy (Schmid et al., 2012). Movement therapy is

usually performed with breathing techniques and meditation as part of traditional Indian medicine. This combination has the potential to enhance cognitive and emotional upon recovery / rehabilitation of stroke survivors. In Kerala, there is a developing trend of incorporating yoga therapy as an adjunct to rehabilitation for stroke survivors.

- **Cardiopulmonary Rehabilitation**

Cardiopulmonary rehabilitation techniques are designed to enhance respiratory efficiency, heart endurance, and oxygen utilization in patients. Pranayama techniques like Anulom Vilom, Bhramari, and Kapalbhati are crucial in enhancing respiratory capacity and regulating breathing patterns in patients.

Scientific research has shown that controlled breathing techniques can enhance respiratory capacity, reduce sympathetic nervous system activity, and increase oxygen saturation in patients (Jerath et al., 2015). These techniques can prove highly useful in patients suffering from respiratory problems like asthma and chronic obstructive pulmonary disease (COPD) as well as heart problems.

Pranayama is commonly used in various regions of India as part of health programs, yoga camps, and rehabilitation programs in various hospitals across India due to its effectiveness as a low-cost therapy option.

- **Lifestyle Disorders and Metabolic Health**

Diabetes, obesity, hypertension, and metabolic syndrome are all examples of lifestyle diseases that pose significant threats to people's health globally. The Indian traditional system provides a holistic approach to tackling these types of diseases through combining both physical health (as seen in Ayurveda) with mental health (as in Yoga).

Research shows that yoga, along with pranayama practices, positively affect insulin resistance, glucose levels, and lipid metabolism while also supporting stress management. Stress is a huge contributing factor in lifestyle diseases (Innes & Selfe, 2016). Surya Namaskar performed alongside diet moderation and the use of Dinacharya principles will promote the maintenance of a healthy weight as well as metabolic stability.

The yoga-based interventions for lifestyle management implemented by the Ministry of AYUSH and various yoga research institutions across India have yielded positive outcomes for controlling lifestyle diseases such as hypertension and diabetes, and represent an integrated approach for delivering traditional solutions to contemporary healthcare solutions to modern day health problems through preventive and sustainable means.

The inclusion of traditional Indian practices in modern rehabilitation programs can provide a multi-dimensional approach to physical, mental and metabolic wellness. The inclusion of physiotherapy, yoga, pranayama, and massage can make rehabilitation more effective, efficient, and relevant.

## Challenges and Future Directions

In spite of the increasing awareness and acceptance of integrative rehabilitation techniques, there are still some challenges to be overcome.

### Challenges

- **Lack of Standardized Protocols**

One of the main drawbacks is the lack of standardized protocols to integrate the traditional techniques into the rehabilitation process. Since the techniques vary, it is not possible to standardize the results.

- **Need for Large Scale Randomized Controlled Trials (RCTs)**

Even though there is sufficient evidence to support the benefits of yoga and other techniques, the need for conducting large-scale randomized controlled trials to establish the efficacy of these techniques is still felt to include them in the rehabilitation guidelines (Cramer et al., 2014).

Need to Integrate the Knowledge of Physiotherapy with Traditional Indian Therapies

Since there is a lack of training programs to integrate the knowledge of physiotherapy with traditional Indian therapies, it is not possible to effectively apply the integrative techniques.

### Future Directions

- **AI-Based Personalized Vyayama Programs**

In the context of the Ayurvedic concept of Prakriti-based prescription, it is possible to design individualized exercise programs using the recent advances in the field of artificial intelligence.

- **Integration into Global Rehabilitation Guidelines**

Integrating yoga and pranayama into the global rehabilitation guidelines can help to increase the acceptance and application of these techniques. Organizations such as the World Health Organization have already emphasized the importance of incorporating the benefits of traditional and complementary medicine into the healthcare system (WHO, 2019).

- **Community-Based Preventive Models**

Integrative techniques can be applied at the community level to promote preventive health. Yoga camps, school-based programs, and work site wellness programs can be implemented to promote the benefits of yoga. Large-scale yoga programs carried out in India can be cited as examples.

### Conclusion

The transition from ancient "Vyayama" (exercises) to modern rehabilitation approaches illustrates a merging of traditional knowledge and science. Indian

Knowledge Systems contribute valuable knowledge regarding individualized treatment, moderation, and holistic care that can be applied and closely linked to modern physiotherapy approaches.

Yoga, pranayama, Abhyanga and Marma therapy are some of the older techniques that, if incorporated into modern rehabilitation methods, can increase the effectiveness of rehabilitation, create a patient-centered approach, and produce more sustainable healing methods. Each technique contributes to rehabilitation success through a supportive environment that fosters healing while managing lifestyle-related disease rates globally.

As the science of healing continues to advance, there is considerable potential for ancient wisdom to influence the future of rehabilitation in a positive manner.

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