

VOL. 2 | ISSUE 3 | JUNE 2025

PHYSIOZINE™

Advancing Physiotherapy Knowledge & Innovation

BEYOND PAIN

UNLOCKING THE
POTENTIAL OF
LITTLE BRAINS

**PHOTOBIO
MODULATION**

**ASTRONAUT
RECOVERY**

**SMART
REHABILITATION**

**DR. MOHAMMED
AMJAD KHAN (PT)**

Journey from India to Saudi Arabia



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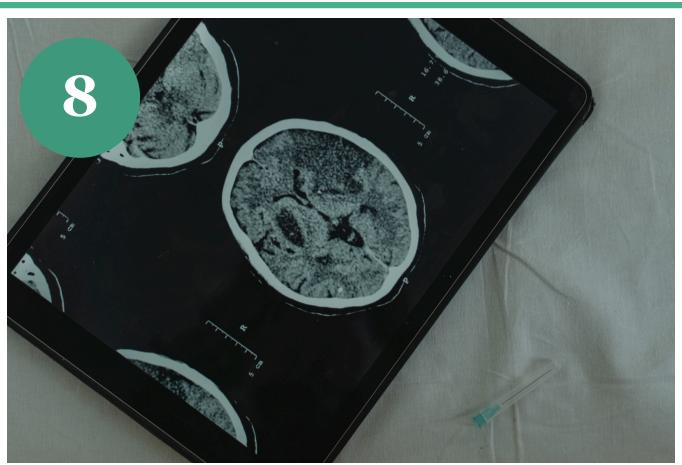
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PhysioZine is a dynamic platform dedicated to advancing the field of physiotherapy. It serves as a comprehensive resource for both seasoned professionals and aspiring therapists. Through its e-magazine, online courses, and engaging community, PhysioZine offers a wealth of knowledge, including expert articles, interviews, research insights, and practical techniques. Whether you're seeking to stay updated on the latest trends or enhance your clinical skills, PhysioZine is your go-to destination for all things physiotherapy.

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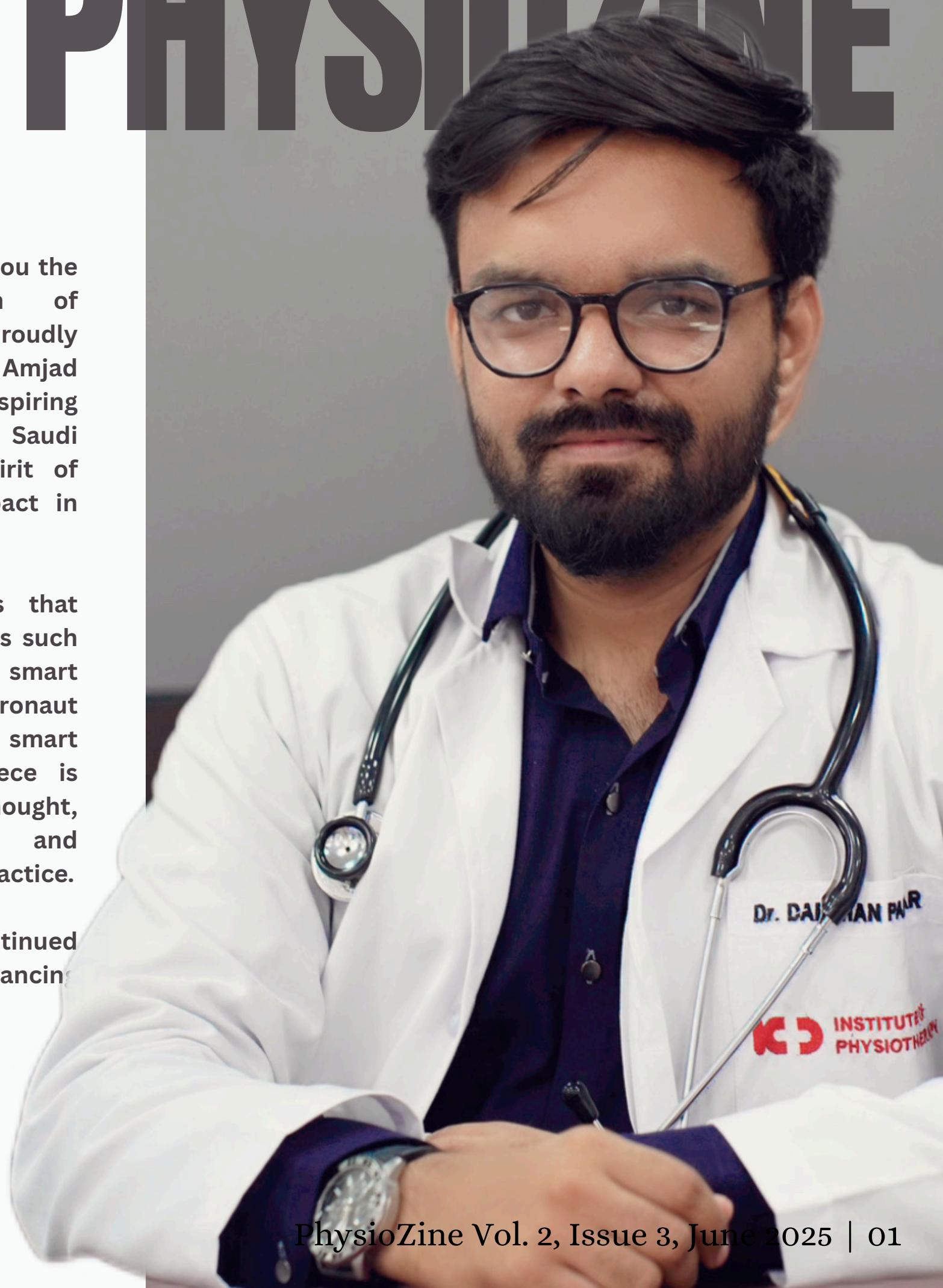
Dear Readers,

It's a pleasure to bring you the June 2025 edition of PhysioZine. This issue proudly features Dr. Mohammed Amjad Khan (PT), whose inspiring journey from India to Saudi Arabia reflects the spirit of growth and global impact in physiotherapy.

We've curated articles that explore innovative topics such as photobiomodulation, smart rehabilitation, astronaut recovery, and smart rehabilitation. Each piece is designed to spark thought, expand knowledge, and empower your clinical practice.

Thank you for your continued support. Let's keep advancing physiotherapy—together.

Warm regards,
Dr. Darshan Parmar
Founder, PhysioZine



CHIEF EDITOR

Dear Readers,

Welcome to the June 2025 edition of PhysioZine! This issue celebrates resilience, innovation, and global journeys in physiotherapy.

Our cover story features Dr. Mohammed Amjad Khan (PT), highlighting his inspiring professional path from India to Saudi Arabia. Alongside, we present thought-provoking articles on smart rehabilitation, photobiomodulation, astronaut recovery, and advancements like "Unlocking the Potential of Little Brains."

We hope this edition enlightens, educates, and energizes you in your professional journey. Thank you for being part of the PhysioZine community.

Sincerely,
Dr. Jaspreet Kaur Kang
Chief Editor, PhysioZine



Dr. Mohammed Amjad Khan's professional journey, which began with a diploma in 2000, spans over 25 years in physiotherapy. He earned his Bachelor of Physiotherapy from Sikkim Manipal University (2005–2010), laying the foundation for a career marked by clinical excellence and patient-centered care.

Dr. Khan's expertise encompasses orthopedic, musculoskeletal care, sports rehabilitation, paediatric care, and complex post-operative recovery. He has treated conditions ranging from cerebral palsy in children to sports injuries and chronic musculoskeletal pain, consistently using evidence-based approaches to optimize patient outcomes. His clinical accuracy in diagnosis and assessment is highly regarded by peers, especially across Saudi Arabia, further enhancing his reputation.

Beyond clinical practice, Dr. Khan has made significant contributions to scholarly research. His 2023 publication, Effects of the 11+ injury prevention program in reducing the non-specific knee injuries incidence rate among soccer players: A systematic review and meta-analysis, A garnered widespread recognition. He recently published a paper titled Injury Prevention Programs in Youth Football: A Narrative Review of the 11+ and FUNBALL Programs, offering valuable insights to clinicians, coaches, and sports organizations and raising awareness of structured prevention strategies in youth football.

His broader research interests include injury prevention, orthopedic care, and clinical rehabilitation, with several publications featured in respected peer-reviewed journals and magazines.



Dr. Khan authored Evidence-Based Assessment of the Knee Joint in Osteoarthritis, providing a comprehensive guide for physiotherapists. As a peer reviewer, he ensures the quality and integrity of physiotherapy literature. He has also reviewed for the Bulletin of Faculty of Physical Therapy, the official publication of the Faculty of Physical Therapy at Cairo University.

An educator at heart, Dr. Khan has presented case series for the 2025 Saudi Arabia Musculoskeletal Board for Physical Therapists under the Saudi Commission for Health Specialties, sharing his clinical knowledge to advance the field. His global influence extends through social media platforms like Snapchat, Instagram, and LinkedIn, where he shares insights on physiotherapy and evidence-based practices. He also contributes regularly to physiotherapy magazines like Physiozine, Physiotimes, and MedBound Times, a medical journalism publication based in Chicago.

Dr. Khan's impact in Saudi Arabia, particularly among vulnerable populations such as children with cerebral palsy and individuals with head injuries or multiple traumas requiring post-operative rehabilitation, has been profound. He is known for his accurate diagnoses and clinical assessments, which have earned him the trust of both patients and healthcare professionals. He has worked at institutions like Hurray Mala General Hospital, Al Kharj General Hospital, and specialized rehabilitation centers in Al Kharj and Medina. He currently practices at Physiplans Physiotherapy and Rehabilitation Centre in Medina.

Dr. Mohammed Amjad Khan continues to inspire both colleagues and patients with his unwavering commitment to compassionate, high-quality care.



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Beyond Pain

It is Not Just the Symptoms – An Evidence Based Physiotherapy Approach

Physiotherapy is not only about finding out how to relieve pain; it's about pinpointing and correcting exactly what the dysfunction is. While most patients want to come to physiotherapy for symptomatic relief, treating only the symptoms will most likely lead to a repeat and chronic condition. Long-term recovery requires a root-cause approach that incorporates biomechanics, neuromuscular function, and movement patterns.

The Issue with Symptomatic Treatment

The symptoms, such as pain stiffness or weakness, without addressing their cause, may provide temporary relief, but they lead to recurring problems



Let us look at some instances:

- Lower Back Pain: A patient may have pain relief from manual therapy or electrotherapy, but if the root cause is weak core muscles or poor hip mobility, the pain will likely return.
- Knee Pain: Runners suffering from knee pain often rely on minimal approaches such as icing or taping. However, the source of the problem is often hip instability or poor biomechanics, which leads to further injury.
- Neck Pain: Poor posture and scapular dyskinesis are often the real cause, yet many treatments focus only on symptom relief without correcting postural imbalances.

The Root-Cause Approach in Physiotherapy

The root-cause approach tries to tackle the fundamental issue with physiotherapy, rather than just symptoms. In simpler terms, try looking at things from a wider lens and focusing on other factors. Doing this will make sure that there are much better long-term results.



**Dr. Muhammed
Nazeeh (P.T.)**

**Bachelor of
Physiotherapy**



Key principles include:

1. Thorough Assessment and Movement Analysis

In curbing symptoms such as discomfort and pain, a physiotherapist will perform a series of evaluations and even try to carry out range of motion exercises. These procedures are extremely critical when trying to figure out the underlying factors. These include:

- Postural analysis : Trying to uncover which imbalances and asymmetries (Kendall et al., 2005).

- Gait and movement assessment: Understanding biomechanics in activities of daily living (Dingenen et al., 2018).

- Muscle strength and activation testing: Detecting weakness or compensation patterns (Hodges & Smeets, 2015).

2. Overcoming Restrictive Movements

Most issues are related to the muscles and bones from faulty actions being performed. Adjusting improper movements helps with tissue strains and prevents re-injury.

For example:

- Patients who have pain are usually found to have an issue with their hip abductor muscles, and treating them helps (Ferber et al., 2015).

- Low back pain (LBP) is usually associated with insufficient core strength. Recurrence of LBP has been shown to be lessened by muscle building of multifidus and transverse abdominis (Hides et al., 2001).

3. Strengthening And Mobilizing Muscles And Joints

Chronic pain usually stems from an imbalance of muscles and restricted joints. Evidence-based approach:

- For lower limb injuries to the leg, it is suggested to strengthen the gluteals (Dischiavi et al., 2018). - Thoracic mobility exercises for shoulder pain (Struyf et al., 2017).

- For tendinopathies, Training (Malliaras et al., 2013).

4. Proprioception and Neuromuscular Control

People suffering from musculoskeletal pain often suffer from muscle movement issues. Treatment must include rehabilitation for:

- Ankle injury proprioceptive training helps reduce the risk of sprains that happen more than once (Hupperets et al., 2009).

- Exercises that target controlling motion for chronic lower back pain improve deep muscle activation (Saragiotti et al., 2016).

Example Case: Managing Pain of Chronic Lower Back Problems

The patient suffers from chronic low back pain (LBP). In a symptom-based approach, the patient would be treated with a combination of heat therapy, massage, and analgesics. However, a root-cause method includes the following:

- . Assessment: Noting weak core muscles, tight hip flexors, and bad movement patterns.

- . Treatment plan:

- Strengthening deep core muscles (Hides et al., 2001). - Mobilizing hip flexors to improve pelvic alignment (Page, 2012).

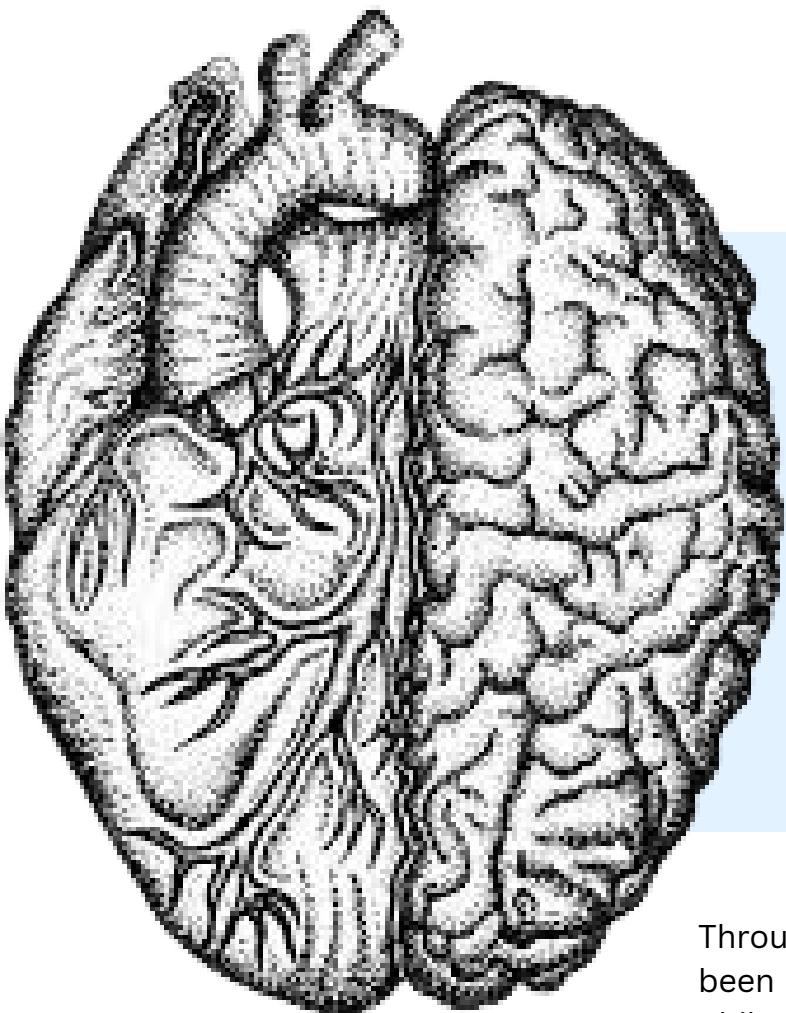
- Movement pattern alterations to prevent compensations (O'Sullivan, 2005).

- 3. Result: Less pain and better function with minimal risk of re-injury.

In physiotherapy, addressing a problem through its symptoms may provide short-term relief, but it does not provide a solution in the long run. Taking an integrated approach and addressing the root cause of the dysfunction through assessment, movement correction, strengthening, and even neuromuscular training helps physiotherapists enhance their results. Evidence strongly supports this approach, making it a necessary shift in modern physiotherapy practice.

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UNLOCKING THE POTENTIAL OF THAT LITTLE BRAIN



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Throughout history, the human heart has been a complex organ that has intrigued philosophers, physicians, and scientists alike.

Today, heart-related diseases continue to affect millions of people worldwide, prompting extensive physiological and clinical research. The heart primarily consists of cardiac muscle tissue, as well as fibrous and neural tissues.

The heart is a vital organ, about the size of a fist, and is located slightly to the left side of the breastbone. It functions as a pumping organ, starting its first beat at the end of the fourth week of gestation. The heart beats approximately 100,000 times each day. Over a lifetime, it generates enough energy to drive a truck for 20 miles, which is equivalent to the distance from the Earth to the moon and back.

The heart has long been a topic of scientific discussion and study. By the early 19th century, researchers understood that there is a clear interaction between the brain and cardiovascular function. It was observed that the heart could continue to beat even when removed from the body, suggesting that the heartbeat is not solely dependent on its nerve connections to the brain. This observation indicated that the heart can act independently.

The understanding of the heart has evolved dramatically over time. Experts have discovered that the heart contains its own nerve cells, similar to those found in the brain. This means that the heart has its own nervous system that can function independently of the brain, often referred to as the "little brain of the heart."

The heart is no longer just a pump; it acts as an independent operator that can influence our perceptions, behavior, and performance. The heart's little brain is capable of remembering, thinking, and learning. It also functions as an emotion processor, translating the body's signals into understandable messages for the brain.

Heart-Brain Harmony

Scientific advancements have revealed the roles of the autonomic nervous system (ANS), part of the central nervous system (CNS), and the intrinsic cardiac nervous system (ICNS) in coordinating normal physiological cardiac functions.

The intrinsic cardiac nervous system (ICNS) is a complex network of nerves located in the heart, often referred to as the "mini-brain" or "little brain" because of its similarities to the brain in the head. This network is found in the fat pads of the epicardium, and one of the significant discoveries is that it is extensive enough to be described as a "brain in the heart." The heart-brain, as it is commonly known, consists of an intricate system of ganglia, neurotransmitters, proteins, and support cells that resemble those found in the brain.

Histological studies reveal that the human heart contains ganglia of various sizes, each having a distinct number of neurons that range from small to large. These ganglia are dispersed throughout the heart and can be difficult to detect.

The average size of human cardiac neurons is approximately 39 µm. In total, the heart is composed of around 40,000 neurons, which resemble neurons found in the brain.

Communication between the brain and heart is bidirectional. The central nervous system (CNS) regulates cardiac activity, while the heart also sends signals to the brain. Numerous studies have shown that there is substantial crosstalk between these two organs.

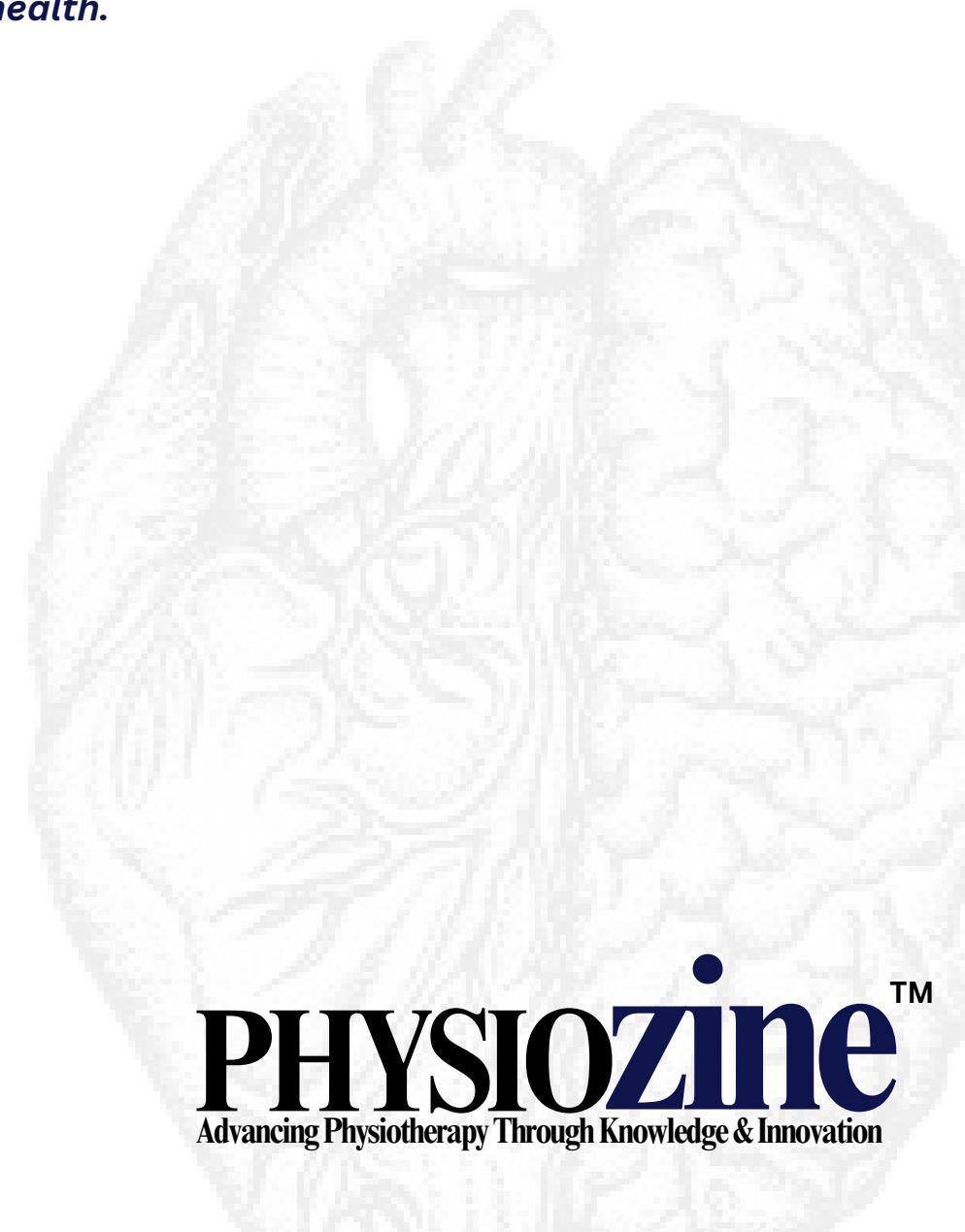
In the context of heart-brain communication, it is widely understood that the efferent (descending) pathways in the autonomic nervous system play a crucial role in regulating the heart. However, it is less recognized that most of the fibres in the vagus nerves are actually afferent (ascending) fibres.

Additionally, there are more ascending neural pathways connected to the heart and cardiovascular system than to any other organ. This indicates that the heart sends more information to the brain than the brain sends to the heart. Signals from the heart's brain are transmitted to the medulla, hypothalamus, thalamus, amygdala, and cerebral cortex.

The heart's intrinsic nervous system processes information and sends appropriate signals to the sinoatrial node and other tissues within the heart.

Under normal physiological conditions, the heart's intrinsic nervous system significantly contributes to the routine control of cardiac function, independent of the central nervous system.

In conclusion, the heart's intrinsic nervous system plays a crucial role in ensuring cardiovascular stability and efficiency, highlighting its necessity for proper heart function and overall health.



Advancing Recovery with **PHOTOBIOMODULATION**

Evidence-Based Insights for Physiotherapists

Red-light therapy (RLT) and near-infrared therapy (NIR) have emerged as non-invasive and innovative approaches for improving cellular function, reducing pain, and enhancing overall wellness. These therapies, which utilize specific wavelengths of light, have demonstrated efficacy in promoting tissue repair, reducing inflammation, and supporting mental well-being. This article explores the underlying mechanisms of RLT and NIR, their applications in physiotherapy, and research-backed benefits in treating various conditions, including musculoskeletal injuries and mental health disorders.





Manthan Chauhan
Founder & CEO of
Healthytrac,
Pharmapreneur
Medical Advisor at
Axamine.ai

Introduction

Red light therapy (RLT) and near-infrared therapy (NIR) involve the application of light at specific wavelengths (typically 600–1000 nm) to stimulate cellular processes and promote healing. Unlike ultraviolet light, which can damage skin cells, RLT and NIR penetrate deep into tissues without harmful effects. This ability makes them invaluable tools in modern physiotherapy, addressing a wide range of conditions from chronic pain to mental health disorders.

Understanding the Mechanisms of RLT and NIR At the cellular level, RLT and NIR enhance mitochondrial function by stimulating cytochrome c oxidase, a key enzyme in the electron transport chain. This process boosts adenosine triphosphate (ATP) production, the energy currency of cells, enabling faster healing and tissue regeneration. Additionally, these therapies reduce oxidative stress and inflammation, creating an environment conducive to recovery.

Therapeutic Applications

- **Musculoskeletal Injuries:** RLT and NIR have shown efficacy in treating muscle strains, ligament injuries, and joint disorders by accelerating tissue repair and reducing inflammation. Studies indicate significant improvements in pain relief and functional mobility when combined with physiotherapy.
- **Mental Health Disorders:** Emerging research highlights the benefits of RLT and NIR in managing mental health conditions such as depression, anxiety, and cognitive impairments. Studies suggest that light therapy enhances cerebral blood flow, promotes neurogenesis, and modulates brainwave activity, contributing to improved mood and mental clarity.
- **Chronic Pain Management:** Light therapy offers a drug-free solution for chronic pain conditions such as fibromyalgia and arthritis. The anti-inflammatory effects combined with increased endorphin release help alleviate pain and improve quality of life.

- **Performance and Recovery in Athletes:** Athletes benefit from RLT and NIR through reduced muscle soreness, quicker recovery times, and enhanced endurance. These therapies are increasingly being incorporated into sports physiotherapy regimens.

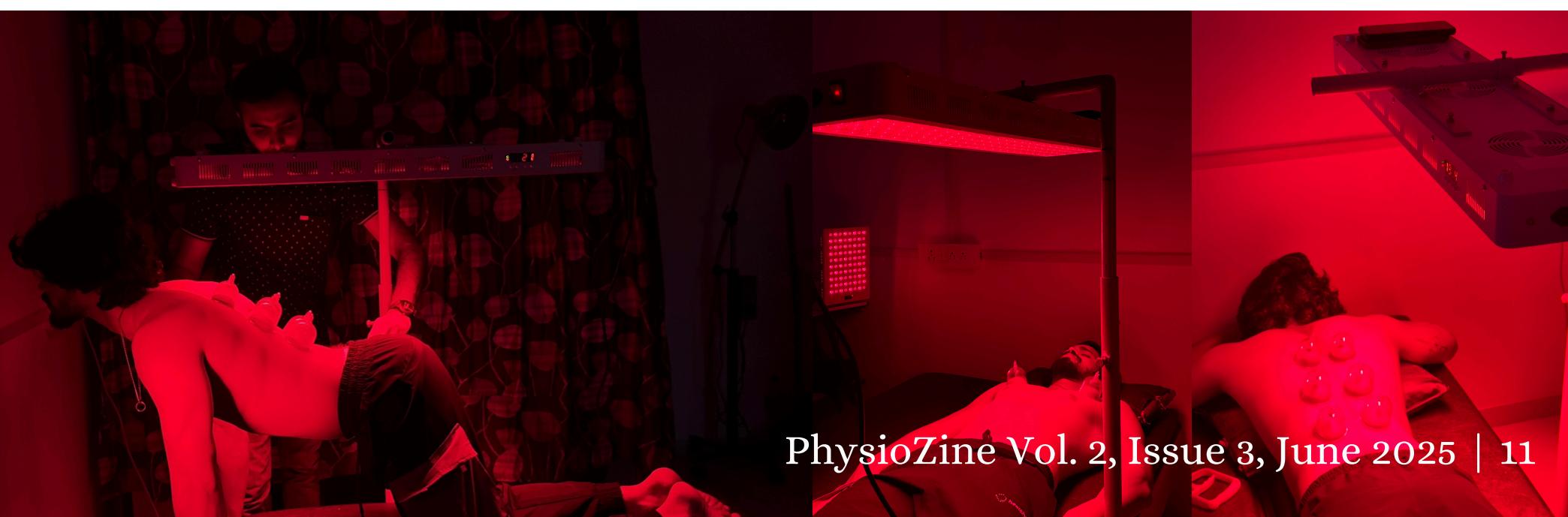
Research Insights

Numerous studies validate the efficacy of RLT and NIR across various domains. For example:

- A 2019 study published in *Frontiers in Psychiatry* demonstrated significant improvements in depressive symptoms among participants undergoing NIR therapy.
- Research in *Lasers in Medical Science* (2021) highlighted accelerated muscle recovery and reduced inflammation in athletes treated with RLT.
- Clinical trials on Alzheimer's disease patients reported enhanced cognitive performance and slowed disease progression with regular NIR sessions.

Conclusion

Red and near-infrared therapies are revolutionizing the field of physiotherapy and beyond. By harnessing the natural healing power of light, these therapies offer safe, effective, and versatile solutions for a range of conditions, from physical injuries to mental health challenges.



Healthytrac: Revolutionizing Wellness with Red Light Therapy Panels

Healthytrac, is a trailblazer in the field of red-light therapy. Offering advanced therapy panels tailored for both professional and personal use, Healthytrac brings the science of light therapy to gyms, physio & wellness centers, and homes. With clinically validated wavelengths, compact designs, and user-friendly interfaces, Healthytrac ensures maximum therapeutic benefits for diverse needs. Committed to education and research, the brand empowers users with workshops, ambassador programs, and scientifically backed solutions. Healthytrac is not just a product – it's a wellness revolution, making healthier living accessible to everyone.

How Healthytrac can help its users

Healthytrac red light therapy panels are designed to deliver clinically validated wavelengths for optimal results in various domains:

- Athlete Performance: Healthytrac panels enhance endurance and reduce recovery time by stimulating blood flow and cellular energy production, helping athletes achieve peak performance.
- Skin Health: With advanced light penetration, Healthytrac devices promote collagen production, reducing wrinkles and enhancing skin elasticity.
- Muscle Recovery: Healthytrac's targeted red and near-infrared light accelerates tissue repair and reduces inflammation, ideal for physiotherapy.
- Mental Well-being: Research-backed benefits of Healthytrac include mood enhancement and stress reduction, aiding in mental health management.

Chronic Pain Relief: Healthytrac panels offer drug-free solutions for conditions like arthritis, providing pain relief through anti-inflammatory effects.

SMART REHABILITATION: UNLOCKING THE POTENTIAL OF WEARABLE DEVICES IN PHYSIOTHERAPY



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Smart devices have become our constant companions, bridging the gap between generations and ages. Smart wearables have extended their impact beyond everyday life, bringing innovation and efficiency to physiotherapy and rehabilitation, and improving patient outcomes.

ROLE OF SMART WEARABLE IN PHYSIOTHERAPY:

- Continuous Monitoring: Continuously track patient progress and vital signs in real-time.
- Personalized Treatment: Create customized treatment plans based on patient data.
- Improved Patient Engagement: Encourage patient participation and motivation through data-driven insight.
- Enhanced Recovery: Optimize rehabilitation programs for faster and better recovery.
- Data-Driven Decision Making: Help decisions with accurate and reliable data.

TYPES OF WEARABLE DEVICES IN PHYSICAL THERAPY

1. Fitness Trackers: A fitness tracker is a handy device that monitors your daily activities and health metrics, providing valuable insights to help you stay on track. It tracks essential data such as steps taken, distance covered, calories burned, heart rate, and sleep patterns. Using advanced sensors to detect your movements, the device converts the data into easy-to-understand information. This empowers you to stay on top of your fitness goals and make informed, healthy lifestyle choices.

2. Smart watches: A smartwatch is a small computer that you wear on your wrist, like a watch, offering a wide range of features to keep you connected, organized, and on top of your fitness goals. With its intuitive touchscreen and specialized apps, you can easily access real-time data, receive exercise reminders, and customize alerts to suit your needs. Whether you want to track your fitness progress, receive important notifications, control other devices, or stay motivated and focused, a smartwatch makes it all possible. Essentially, it's like having a personal assistant conveniently strapped to your wrist.

3. Motion Sensors: Motion sensors are small, innovative devices that track movement and orientation, playing a vital role in physical therapy and fitness. These devices are used to monitor joint angles and movement patterns, track progress and improvement, and provide real-time feedback to both patients and therapists. By attaching motion sensors to limbs, clothing, or equipment, valuable data is collected to help optimize movement and performance, ultimately enhancing rehabilitation programs and exercise routines.

4. Biofeedback Devices: Biofeedback devices offer real-time feedback on muscle tension, enabling patients to take control of their physical performance. By providing instant insights, these devices help patients develop proper movement control, master correct techniques, and reduce muscle strain and injury. Through advanced sensors that detect muscle activity, biofeedback devices empower patients to make informed adjustments, allowing them to optimize their physical performance and achieve their rehabilitation goals.

5. Gait Analysis Systems: A gait analysis system is a state-of-the-art technology that provides a comprehensive evaluation of an individual's walking pattern. By assessing stride length and width, cadence and speed, balance and stability, and foot strike and movement, this system delivers valuable insights that enable healthcare professionals, researchers, and coaches to identify gait abnormalities, develop personalized rehabilitation plans, enhance athletic performance, and monitor progress over time.

CHALLENGES IN USING WEARABLE DEVICES IN REHABILITATION PROGRAMS

1. Accuracy of data. There is doubt about the accuracy of data obtained from the wearable devices. Inaccurate data lead to the faulty rehabilitation programs.

2. Standardisation of methods and equipment. Different companies provide different features in the wearable devices which could pose challenge both for the therapist and the subject.

3. Privacy and confidentiality of information: it pose a threat on the patients private and confidential data.

4. Cost effectiveness: some of these devices are expensive and are not available for common populations. High costing and availability should be managed widely.



In conclusion, smart wearables have the potential to revolutionize the field of physiotherapy by enabling continuous assessments and improving patient outcomes. These innovative devices can make rehabilitation programs more effective, efficient, and personalized, ultimately leading to better patient care and handling. By embracing smart wearables, physiotherapists can enhance their practice, improve patient engagement, and achieve superior treatment outcomes.

REHABILITATING THE STARS: A PHYSIOTHERAPIST PERSPECTIVE ON ASTRONAUT RECOVERY



RAHUL RAJEEV

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PHYSIOzine™
Advancing Physiotherapy Through Knowledge & Innovation

As astronauts like Sunita Williams venture into space, they face unparalleled physical challenges. Prolonged exposure to microgravity can lead to muscle atrophy, bone density loss, and a range of other health issues. As a physiotherapist, it's fascinating to explore the critical role rehabilitation therapy plays in helping astronauts recover and adapt to life back on Earth.

The Challenges of Space Travel

Space travel poses unique physical challenges. Microgravity environments cause:

1. Muscle Atrophy: Weakening of muscles due to reduced load-bearing activities, particularly in the lower body. This can lead to decreased muscle mass, strength, and endurance.
 2. Bone Density Loss: Decrease in bone density due to lack of gravitational force, increasing the risk of fractures, osteoporosis, and bone pain.
 3. Fluid Redistribution: Changes in body fluid distribution, causing puffiness and sensitivity in the feet, often referred to as "baby feet." This can lead to discomfort, pain, and difficulty walking.
 4. Vision Issues: Microgravity can lead to fluid buildup in the head, affecting vision and potentially altering the shape of the eyeballs. This can cause blurred vision, double vision, and eye strain.
 5. Sleep Disturbances: Disruptions to the normal sleep-wake cycle due to the lack of a typical day night cycle, leading to fatigue, decreased cognitive function, and mood disturbances.
 6. Cardiovascular Changes: Changes in blood pressure, cardiac output, and vascular resistance due to microgravity exposure, increasing the risk of cardiovascular disease.
- Physiotherapy: A Crucial Component of Rehabilitation**
- Physiotherapy is essential for addressing the physical symptoms and limitations faced by astronauts post-mission. A tailored rehabilitation program can help:
1. Rebuild Muscle Strength and Mass: Focused exercises and strength training can help restore muscle function, particularly in the lower body. This can include resistance band exercises, weightlifting, and bodyweight exercises.
 2. Restore Bone Density: Impact exercises and weight-bearing activities can simulate the effects of gravity, promoting bone health. This can include activities like walking, running, jumping, and resistance training.
 3. Alleviate Discomfort and Improve Mobility: Targeted treatments, such as manual therapy, massage, and exercise prescription, can address pain and stiffness in the feet, legs, and lower back.
 4. Enhance Balance and Coordination: Exercises designed to challenge balance and coordination can help astronauts adapt to Earth's gravity. This can include activities like single-leg squats, balance boards, and obstacle courses.
 5. Correct Vision Issues: Visual training and adjustments can help astronauts adapt to changes in eyesight. This can include exercises like eye rotations, focusing, and convergence training.
 6. Improve Cardiovascular Function: Exercises and training programs can help astronauts regain normal cardiovascular function. This can include activities like aerobic exercise, high-intensity interval training, and strength training.
 7. Address Sleep Disturbances: Strategies to improve sleep quality, such as relaxation techniques, sleep schedule adjustments, and environmental modifications, can help astronauts overcome sleep disturbances.
 8. Enhance Functional Abilities: Training to improve daily living activities, such as walking, climbing stairs, and performing household tasks, can help astronauts regain independence and confidence.

A Multidisciplinary Approach

Rehabilitation therapy for astronauts requires a multidisciplinary approach. Physiotherapists work closely with:

1. Medical Team: Collaborating with medical professionals to address any underlying health concerns, such as cardiovascular disease or musculoskeletal injuries.
2. Nutritionists: Ensure astronauts receive a balanced diet rich in protein, calcium, and vitamin D to support muscle and bone recovery.
3. Occupational Therapists: Addressing daily living activities and functional limitations, such as dressing, grooming, and feeding.
4. Psychologists: Providing support for mental health and well-being, including stress management, anxiety, and depression.

Conclusion

As astronauts continue to push the boundaries of space exploration, physiotherapists play a vital role in helping them recover and adapt to life back on Earth. By understanding the unique challenges of space travel and providing tailored rehabilitation programs, physiotherapists can help astronauts like Sunita Williams regain optimal physical function and overall well-being.



Dr. Nagaveni Hegde (PT)



Dr. Shalini Singh (PT)



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