

# 13th World Congress on **PHYSIOTHERAPY, PHYSICAL REHABILITATION & SPORTS MEDICINE**



**06-07**

OCTOBER 2025



DUBAI, UAE



Venue: COTHORNE HOTEL DUBAI  
Port Saeed, Deira Dubai, UAE





# Day 1

October 06, 2025 | Dubai, UAE  
Conference Hall : Al Majlis

## Scientific Program

08:30–08:45: Registrations

08:45–09:00: Opening Ceremony

### Keynote Presentations



09:00–9:30

**Title: Lumbosacral zone features in individuals with nonspecific low back pain are unique compared to controls and correlate with pain and dysfunction**

**Masharawi Youssef**

Gray Faculty of Medicine, Tel Aviv Jaffa, Israel



09:30–10:00

**Title: Eating Disorders and Relative Energy Deficiency in Sport (RED-S) Among Professional Footballers: A Qualitative Exploration**

**Kadhim Alabady**

Dubai Health Authority (DHA), Public Health, UAE



10:00–10:30

**Title: The International Classification of Functioning, Disability and Health (ICF) as a Framework for Rehabilitation in Metabolic Disorders: Insights from the DREAM Program**

**Hamzeh Awad**

College of Pharmacy and Health Sciences, Ajman University, UAE

**Group Photo | Coffee Break 10:30-10:50@ Foyer**

### Session Introduction

### Tracks

**Physical Therapy Science | Physiotherapy in Treatment & Care | Manual & Manipulative Therapy | Physical Medicine & Rehabilitation | Neurological Rehabilitation | Science and Medicine in Sport | Experimental techniques in Physiotherapies**

**Session Chair: Hamzeh Awad, Ajman University, UAE**

**Session Co-Chair: Kadhim Alabady, Dubai Health Authority, UAE**

## Oral Presentations

10:50–11:10

**Title: Our body speaks to us, Let's listen to it**

**Andre Perceval**

Somato Psychic Restoration, Sensory association, Grenoble  
School of Physiotherapy, France

11:10–11:30

**Title: Gastroesophageal Reflux Disease linked to Cervical and Thoracic Spine Abnormality: A Case Study of an Osteopathic Approach to treatment**

**Mahathir Mohamed**

Evolve Precision Healthcare, Malaysia

11:30–11:50

**Title: E-BABE- Comparison of the Effects of Quadriceps Femoris and Gluteus Medius Strengthening Exercises on Balance in Hemiplegic Patients**

**Yasemin Sahbaz**

Istanbul Beykent University, Istanbul, Turkey

11:50–12:10

**Title: Experience at a RHB Performance Center Inside a Multispeciality Hospital in Dubai**

**Jose M Bueno Padilla**

Dubai, UAE

12:10–12:30

**Title: Evaluation of Spinal Mobility and Asymmetric Movements in Horse Riders**

**Hazal Berfin Yilmaz**

Mudanya University, Bursa, Turkey

12:30–12:50

**Title: Objective Measurement in Performance and Rehabilitation: Bridging Science, Technology, and Clinical Outcomes**

**John Boyer**

Performance and Diagnostics Consultant at VALD, Dubai, UAE

## Lunch Break 12:50-13:50 @Crystal Restaurant

13:50–14:10

**Title: Association between rural work practices and low back pain in Mizoram: a case-control study**

**Teresa Vanlalpeki**

Zoram Medical College & Hospital, Falkawn, Mizoram, India

14:10–14:30

**Title: Instrument Assisted Soft Tissue Mobilization**

**Gulshan Shahzadi**

Sheikh Khalifa General Hospital | Umm Al Quwain, UAE

14:30–14:50

**Title: Comparison of the Effects of Face-to-Face and Internet-Based Basic Body Awareness Therapy on Trunk Position Sense in Patients with Fibromyalgia**

**Ozge TAHRAN**

Faculty of Health Sciences, Istanbul Beykent University, Turkey

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14:50–15:10

**Title: Inflammation-Preserving Approach for Spontaneous Lumbar Disc Herniation Resorption: A Prospective MRI-Based Clinical Outcome Study**

**Alexander Tkachev**

Tkachev Spine Clinic, Russia

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15:10–15:30

**Title: Objective Assessment of Acupuncture: Effects by Microcirculation- Related Parameters in Patients with Proximal Femur Fracture**

**Ana Alexandra Anjos**

Fatima College of Health Science, Abi Dhabi, UAE

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**Coffee Break 15:30-15:40@ Foyer**

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15:40–16:00

**Title: Rehabilitation Schedule through Plan of Investigation and Ultrasound Images**

**Sedegheh Malek Mohammadi**

Orthotics and Prosthetics Research Clinic Tehran, Iran

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16:00–16:20

**Title: Barefoot walking is beneficial for individuals with persistent plantar heel pain: A single-blind randomized controlled trial**

**Masharawi Youssef**

Gray Faculty of Medicine, Tel Aviv Jaffa, Israel

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**Panel Discussion & Certificate Falcitation**  
**Day –1 Ends**

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# Day 2

## Scientific Program

**Virtual Mode Zoom Meeting  
(GMT+4) Time in Dubai**

**October 07, 2025 | Virtual**

### Keynote Presentations

09:00–9:20

**Title: Neurons that Error Together, Terror Together: Unlocking the mysteries in and rehabilitation for the Yips and other movement disorders in sport**

**Mike Studer**

Touro University Department of Physical Therapy, Las Vegas, Nevada, USA

09:20–9:40

**Title: Scientific Postural Assessment in Sports and Rehabilitation: A New Era with Posturometer**

**Silverio Di Rocca**

M.P.R International School, Switzerland

### Oral Presentations

09:40–10:00

**Title: CORESYNC – An Innovative Audio-Visual Biofeedback Device to Evaluate Bridging Function and Back Extensor Muscle Strength in Patients with Stroke – A Multiphasic Exploratory Study**

**Komal Ajaybhai Doshi**

School of Physiotherapy, RK University, Rajkot, Gujarat, India

10:00–10:20

**Title: Co-relation between Muscle strength & Cancer related fatigue in advanced Lung Cancer in a Tertiary cancer hospital**

**Manali Viraj kamat**

Tata Memorial Hospital, Mumbai, India

10:20–10:40

**Title: Psychological Stress and Its Association with Cervical Pain: An Observational Study**

**Amira Daher**

Zefat Academic College, Physical Therapy Department, Safed, Israel

10:40–11:00

**Title: Bridging Wellness: The Synergy of Physical Education and Physiotherapy in Modern Healthcare**

**Shudir Baran Mazi**

Haimchar Government College, Chandpur, Bangladesh

11:00–11:20

**Title: There is no pain when the center of the disc (nucleus pulposus) presses on the nerve. Instead, the pain will decrease**

**K. M. Yacob**

Marma Health Centre, kaloor, Kochi, Kerala, India

11:20–11:40

**Title: The effects of TECAR therapy on pain, range of motion, strength and subscale of HAGOS questionnaire in athletes with chronic adductor related groin pain: a randomized controlled trial**

**Soheil Mansour Sohani**

Iran University of Medical Sciences, Tehran, Iran

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11:40–12:00

**Title: Invention of an orthosis with the ability to maintain and control the range of motion of the head, spine, and shoulder joints, and electrical stimulation for strengthening the neck and shoulder muscles**

**Elham Seihei**

Founder and Technical Director, Shahid Mohammad Sohrabi Center for Oral, Swallowing, and Nutrition, Iran

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12:00–12:20

**Title: Effects Of Aerobic Exercise On Brain-Derived Neurotrophic Factor Among Stroke Survivors (A Systematic Review And Meta-Analysis)**

**Mahmoud Yunusa Usman**

University of Nigeria, Nsukka, Enugu, Enugu State

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## Panel Discussion

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13th World Congress on  
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October 06–07, 2025 | Dubai, UAE

**HYBRID EVENT**

**EXHIBITOR**





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**HYBRID EVENT**

**KEYNOTE PRESENTATIONS  
DAY 1**



**Masharawi Youssef**

Gray Faculty of Medicine, Tel Aviv Jaffa, Israel

## **Lumbosacral zone features in individuals with nonspecific low back pain are unique compared to controls and correlate with pain and dysfunction**

The study aimed to compare the lumbosacral nerve distances (LNDs) and sacroiliac joint (SIJ) morphology in individuals with nonspecific chronic low back pain (NSCLBP) and controls and examine their correlations with pain and dysfunction. The sample included 200 young adult patients (ranging from 20-50 years old) referred for abdominal computerized tomography (CT): 100 individuals with NSCLBP (50 males and 50 females) and 100 individuals without NSCLBP (50 males and 50 females). CT scans were assessed for LNDs, degenerative sacroiliac changes, and joint bridging. Those factors were correlated to the outcomes of three self-reported questionnaires about pain and function (Oswestry, Fear avoidance and Numerical Pain Rating Scale). The results indicated that Individuals with NSCLBP tend to have reduced LNDs from the sacral part of the SIJ compared to controls (Males: right -  $\Delta = 5.8$  mm, left -  $\Delta = 6.03$  mm; Females: right -  $\Delta = 7.9$  mm, left -  $\Delta = 7.73$  mm, ANOVA-  $p < 0.01$ ), with moderate significant negative correlations with all three questionnaires ( $-0.38 < \text{Pearson's } r < -0.57$ ,  $p < 0.02$ , i.e., reduced LNDs with greater disability and pain). The NSCLBP group had more significant SIJ degeneration severity that moderately correlated with two questionnaires ( $0.39 < \text{Pearson's } r < 0.66$ ,  $p < 0.04$ , i.e., greater SIJ degeneration with greater disability and pain). In males, existence of SIJ bridging strongly correlated with all three questionnaires ( $0.38 < \text{Pearson's } r < 0.78$ ,  $p < 0.03$ ) and in females only the Fear-Avoidance questionnaire and Numerical Pain Scale ( $0.29 < \text{Pearson's } r < 0.41$ ,  $p < 0.04$ ). In conclusion, compared to controls, individuals with NSCLBP have reduced LNDs and worse SIJ degenerative changes that correlate with function and Pain.

### **Biography:**

Youssef Masharawi is an associate Professor and Head of the Master Program in the Physical Therapy Department at Tel Aviv University. Prof. Masharawi established the Spinal Research Lab for clinical and functional research projects concerning the spine and related conditions. He published more than 90 studies in leading peer-reviewed international Journals related to the Spine and musculoskeletal disorders. He teaches undergraduate and postgraduate physical therapy students about the clinical reasoning process and physiotherapy in the movement system and spinal form and function. He has supervised more than 30 Masters and PhD students.



## **Kadhim Alabady**

Public Health Senior Specialist, Public Health Protection Department /  
Dubai Health Authority, United Arab Emirates

# **Eating Disorders and Relative Energy Deficiency in Sport (RED-S) Among Professional Footballers: A Qualitative Exploration**

**Background:** Nutrition is a cornerstone of recovery and performance strategies in professional sport. Accurate assessment of body composition and dietary intake is essential for elite athletes, as appropriate nutrition supports training, optimizes performance, and reduces the risk of illness or injury. However, substantial variability exists in football players' food choices due to individual dietary habits and cultural influences, which may predispose some athletes to eating disorders and Relative Energy Deficiency in Sport (RED-S).

**Purpose:** This study explores the impact of eating disorders and RED-S among professional footballers, with a focus on risk factors, health implications, and opportunities for prevention.

**Methodology:** A qualitative design was employed, utilizing in-depth interviews with 20 nutritionists and dietitians affiliated with top European football clubs. Data were collected across 20 sessions conducted in Europe during 2023–2024.

### **Key Findings:**

- Eating disorders and RED-S in professional footballers are primarily linked to imbalances between dietary energy intake and energy expenditure during training and competition. The main health concerns identified include:
- Insufficient nutrient intake for bone health.
- Lack of mechanical bone loading.
- Elevated psychogenic stress.
- Early identification of eating disorders is associated with improved health outcomes; thus, prioritizing accessible mental health services for at-risk athletes is critical. However, limited screening protocols, insufficient training for healthcare professionals, and barriers to help-seeking contribute to underdiagnosis and unmet treatment needs. Raising awareness within sports organizations can enhance prevention, facilitate early detection, and promote timely intervention. Optimal nutrition remains vital to sustaining high-intensity training, maximizing performance, and supporting recovery from injury.

**Keywords:** Eating disorders, RED-S, nutrition, professional football, sports health.

## Biography:

### **Dr. Kadhim AlAbady, MBBS; MPH; MSc; DrPH; FFPH (UK); FRCP (Glasgow)**

Dr. Kadhim AlAbady is a distinguished public health and epidemiology expert with over two decades of experience in academic, international, and national health systems. He is a Fellow of the Faculty of Public Health in the UK (FFPH) and a Fellow of the Royal College of Physicians and Surgeons of Glasgow (FRCP).

Dr. Alabady holds a Doctorate in Public Health and Epidemiology, a Master's in Clinical Epidemiology (MSc), and a Master's in Public Health (MPH), all awarded by universities in the Netherlands. He is also a registered Grade A Epidemiologist with the Netherlands Epidemiological Society.

Since 1999, Dr. Alabady has held prominent roles across diverse sectors, including:

- **Academia:** Erasmus University (Rotterdam, Netherlands), Queen Mary University (London, UK), and the University of East Anglia (Norwich, UK)
- **International Organizations:** United Nations
- **National Health Institutions:** Qatar's National Health Authority, UK National Health Service (NHS), and the Dubai Health Authority

His work has been instrumental in shaping research and development (R&D) strategies, particularly in the field of non-communicable diseases (NCDs), including mental health, cancer, cardiovascular diseases, diabetes, and broader population health issues. Dr. Alabady has authored numerous publications in the UK, contributing significantly to public health knowledge and policy.



## **Hamzeh Awad**

Head of Physiotherapy Program

College of Pharmacy and Health Sciences, Ajman University, UAE

# **The International Classification of Functioning, Disability and Health (ICF) as a Framework for Rehabilitation in Metabolic Disorders: Insights from the DREAM Program**

The World Health Organization's International Classification of Functioning, Disability and Health (ICF) provides a universal bio-psycho-social framework for describing functioning and disability. This model recognizes the interaction between health conditions, body functions and structures, activities, participation, and contextual factors. In the context of metabolic disorders such as diabetes mellitus, cardiovascular disease, and obesity, the ICF offers an essential language to capture the lived experiences of patients and guide rehabilitation practice. This Abstract highlights the integration of the ICF within the Disability Rehabilitation and Education Alliance in Metabolic Disorders (DREAM), a prototype for interdisciplinary collaboration in rehabilitation. Using a Delphi-based consensus exercise among 22 physiotherapists from 11 countries, 49 relevant ICF categories were identified for diabetes mellitus, confirming the clinical validity of the ICF Core Set for diabetes. The DREAM program operationalizes these insights into a structured rehabilitation cycle—assessment, intervention, evaluation, and follow-up—addressing risk factors, lifestyle modification, physical activity, and telehealth monitoring. The findings demonstrate that the ICF framework not only standardizes the classification of functioning and disability but also enhances multidisciplinary teamwork in metabolic disorders. DREAM illustrates how rehabilitation professionals can assume a central role in non-pharmacological interventions, patient education, and long-term management of chronic conditions. By aligning the “what to measure” (ICF) with the “how to implement” (rehabilitation cycle), DREAM provides a scalable model for prevention, treatment, and quality management in metabolic disorders.

## **Biography:**

Dr. Hamzeh Awad, PhD, FHEA, is Associate Professor and Head of the Physiotherapy Program at the College of Pharmacy and Health Sciences, Ajman University, UAE. His research focuses on rehabilitation in metabolic and chronic disorders, AI Healthcare and Digital health with expertise in physiotherapy and rehab interventions, and the WHO-ICF framework. Dr. Awad has contributed to international collaborations, published in leading journals, and developed the DREAM concept to integrate rehabilitation into diabetes and metabolic disorder management. He is worldwide recognized speaker in many international conferences in rehabilitation as well as AI healthcare and digital health transformations.





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**HYBRID EVENT**

**SPEAKER PRESENTATIONS**  
**DAY 1**



## **André Perceval**

Somato Psychic Restoration, Sensory association, Grenoble School of  
Physiotherapy, France

## **Our body speaks to us, Let's listen to it**

**Y**ou can't dissociate the physical body from the psycho-emotional. The physical body is able to heal itself with its restorative system - DNA, enzymes - which is constantly acting. If the pain persists beyond three to four weeks, it is likely that an emotional conflict is associated with it, signalled by somatizations or changes in behavior. It is then a question of not only emptying the overflowing bucket but also identifying the leaking tap to help the patient reduce the flow or better close it.

The leaky faucet, RSP, Somato-Psychic Restoration, is able to identify it. It can originate in the first months of conception, imprinted in the epigenome. Through its palpatory listening, it can determine its nature. Then, through his reading of the body in several dimensions, to put words to the ailments. It thus provides the patient with an insight that facilitates his or her awareness between past events reactivated by recent ones. This is the starting point of the process of psychic healing that continues with understanding. To do this, RSP proposes possible solutions adapted to the identified mode of behaviour. It does not treat the pathology but helps the patient activate their own healing systems.

With RSP, it is not a question of opposing scientific medicine to that of emotions, but of encouraging them to collaborate so that the patient remains the priority.

### **Biography:**

André Perceval put all the energy he expressed on a rugby field into his research. As a physiotherapist, he did not find in the current approach to medicine all the satisfactory answers to help his patients free themselves from it, so he sought to understand a certain number of disruptive mechanisms that manifest themselves in somatization or behavioral modifications. He thus conceived the RSP, the Somato Psychic Restoration, which approaches Man in his entity and his uniqueness and seeks to find the causes before proposing solutions.



## **Mahathir Mohamed**

Evolve Precision Healthcare, Malaysia

# **Gastroesophageal Reflux Disease linked to Cervical and Thoracic Spine Abnormality: A Case Study of an Osteopathic Approach to treatment**

**Objective:** This case report describes Manual Osteopathy Therapy for the treatment of Gastroesophageal Reflux Disease (GERD), an increasingly common condition which causes significant morbidity.

**Case Study:** The patient is a 70-year-old gentleman with a 4-year history of GERD not responding to conventional medications with a proton pump inhibitor and found to have abnormalities in the cervical and thoracic vertebrae on physical and radiologic examination.

**Intervention and Outcome:** The patient was treated twice with Manual Osteopathic Modalities which are outlined in this case report with excellent result and remained asymptomatic after two (2) treatment sessions.

**Discussions:** This case study will attempt to elucidate the link between the cervical nerves, sympathetic thoracic splanchnic nerves and the pathogenies of GERD.

**Conclusion:** GERD resistant to medical therapy was successfully treated with Manual Osteopathy Therapy within two (2) sessions. This case validates further research on the effectiveness of Manual Osteopathy therapy for GERD and research to look at the link between cervical and thoracic spine abnormalities and GERD.

**Keywords:** Gastroesophageal Reflux Disease, Cervical vertebrae, Thoracic vertebrae Osteopathy

## **Biography:**

Dr. Mahathir Mohamed, M.D., D.O. is a board-certified physician in Anti-Aging, Functional, and Regenerative Medicine with over 24 years of experience in musculoskeletal and longevity care. He specializes in integrative wellness, hormone therapy, and regenerative pain solutions including PRP, peptides, and stem cells. A recognized educator and keynote speaker, he frequently trains healthcare professionals across the region. At this year's World Congress, Dr. Mohamed presents a case study on resolving refractory GERD using Manual Osteopathy Therapy, shedding light on the link between cervical-thoracic spine abnormalities and GERD, and advocating for a multidisciplinary approach to chronic disease.



## Yasemin ŞAHBAZ

Department of Physiotherapy and Rehabilitation, Health Sciences  
Faculty, Istanbul Beykent University, Istanbul, Turkey

# E-BABE- Comparison of the Effects of Quadriceps Femoris and Gluteus Medius Strengthening Exercises on Balance in Hemiplegic Patients

**Aim:** Balance impairment is a common consequence of hemiplegia, significantly affecting functional mobility and independence. Strengthening exercises targeting specific muscle groups have been proposed to improve postural stability in stroke patients. This study compares the effects of quadriceps femoris and gluteus medius strengthening exercises on balance in hemiplegic individuals.

**Method:** A total of 24 hemiplegic patients (8 females, 16 males) were included in the study and randomly assigned to two intervention groups: quadriceps femoris strengthening (Group A) and gluteus medius strengthening (Group B). Both groups participated in a structured rehabilitation program. Balance was assessed using the Berg Balance Scale (BBS) and Timed Up and Go (TUG) test before and after the intervention. Spasticity was evaluated with the Modified Ashworth Scale.

**Results:** showed significant improvements in balance and muscle strength in both groups ( $p < 0.05$ ). However, the gluteus medius strengthening group demonstrated superior improvements in dynamic balance and functional mobility ( $p < 0.05$ ). Between-group comparisons revealed a significant difference in pre-treatment and post-treatment shoulder spasticity scores ( $p = 0.017$ ,  $p = 0.024$ ). No significant differences were found in other variables ( $p > 0.05$ ).

**Conclusion:** Both quadriceps femoris and gluteus medius strengthening exercises effectively enhance balance in hemiplegic patients. However, gluteus medius strengthening appears to provide greater benefits in dynamic postural control and mobility. Integrating targeted muscle strengthening into rehabilitation programs may improve functional outcomes and reduce fall risk in stroke patients.

## Biography:

Yasemin Şahbaz completed her PhD at the age of 34 at Istanbul University-Cerrahpaşa. She is the Vice Dean of the Faculty of Health Sciences and the Head of the Department of Physiotherapy and Rehabilitation at Istanbul Beykent University. She has published 10 articles and 7 book chapters and has presented 29 oral and poster presentations. She continues to teach at the university, conduct research, and develop projects.



**Özge Tahran, PT, PhD<sup>1</sup>, Burcu Ersöz  
Hüseyinsinoğlu, Prof, PT, PhD<sup>2</sup>, Günay Yolcu,  
MD<sup>3</sup>, Evrim Karadağ Saygı, Prof, MD<sup>3</sup>, İpek  
Yeldan, Prof, PT, PhD<sup>4</sup>**

<sup>1</sup>Division of Physiotherapy and Rehabilitation, Faculty of Health Sciences,  
Istanbul Beykent University, Istanbul, Turkey

<sup>2</sup>Division of Physiotherapy and Rehabilitation, Faculty of Health Sciences, Marmara University,  
Istanbul, Turkey

<sup>3</sup>Department of Physical Medicine and Rehabilitation, Marmara University School of Medicine,  
Istanbul, Turkey

<sup>4</sup>Division of Physiotherapy and Rehabilitation, Faculty of Health Sciences, Istanbul University  
Cerrahpasa, Istanbul, Turkey

## Comparison of the Effects of Face-to-Face and Internet-Based Basic Body Awareness Therapy on Trunk Position Sense in Patients with Fibromyalgia

**Introduction and Aim:** Proprioceptive functions, particularly trunk position sense, play a critical role in motor control and functional activities. Previous studies have shown impaired trunk position sense in women with Fibromyalgia (FM), which may contribute to balance and postural control deficits. This study aimed to compare the effects of Basic Body Awareness Therapy (BBAT), delivered either face-to-face (F2F) or via internet-based telerehabilitation (I-BBAT), on trunk position sense in patients with FM.

**Methods:** A total of 51 female patients diagnosed with FM according to the 2016 ACR criteria were randomly assigned to one of three groups: F2F-BBAT (n=17), I-BBAT (n=17), or control group (CG; n=17). Both intervention groups received BBAT for eight weeks (2 sessions/week, 60 minutes/session), either in-person or via video conferencing. The control group remained on a waiting list and received no intervention during the study period. Trunk position sense was evaluated pre- and post-intervention using a digital inclinometer.

**Results:** Forty-one participants completed the study. At baseline, no significant differences were observed among the groups in terms of demographic or clinical variables ( $p>0.05$ ). Post-intervention analyses revealed significant improvements in trunk position sense in both the F2F-BBAT and I-BBAT groups ( $p<0.05$ ), with no significant difference between these two intervention groups ( $p>0.05$ ). The control group showed no significant changes in trunk position sense over the same period ( $p>0.05$ ). Both intervention groups demonstrated significantly better outcomes compared to the control group ( $p<0.05$ ).

**Conclusion:** Both face-to-face and internet-based BBAT interventions were effective in improving trunk position sense in patients with fibromyalgia. The comparable outcomes between delivery modes suggest that internet-based BBAT may serve as a feasible and accessible alternative to traditional face-to-face therapy, particularly in populations with limited access to in-person rehabilitation services.

**Keywords:** Basic Body Awareness Therapy, Fibromyalgia, Proprioception, Telerehabilitation, Trunk Position Sense.



**Hazal Berfin Yilmaz**

Mudanya University, Bursa, Turkey

## Evaluation of Spinal Mobility and Asymmetric Movements in Horse Riders

Spinal mobility is critically important for musculoskeletal health and athletic performance, particularly in sports that demand balance and control. This study aims to examine the relationship between spinal mobility and asymmetric movements in professional horse riders. Repetitive unilateral motions and prolonged horseback riding may contribute to postural asymmetries and potential spinal issues.

The study included 16 professional horse riders aged 18–45 who ride at least three times per week at the Turkish Jockey Club's Bursa Osmangazi Hippodrome. Participants with chronic spinal conditions, neurological disorders, or movement restrictions were excluded. Spinal mobility and joint range of motion were assessed using the Vald HumanTrak Movement Analysis System, which enables high-precision, dynamic movement evaluation.

Results revealed no statistically significant correlation between spinal mobility and variables such as age, BMI, professional experience, or pelvic tilt angle. However, a significant asymmetry was observed in lateral flexion angles between the dominant and non-dominant sides, indicating a possible occupational adaptation among riders. This suggests that while general physical attributes may not directly impact spinal mobility, the asymmetrical demands of horseback riding may lead to postural imbalances over time.

The findings of this study are expected to contribute to the early detection of postural disorders, inform performance enhancement strategies, and support long-term musculoskeletal health among horse riders. Further research with a larger sample size is recommended to strengthen and expand upon these observations.

### Biography:

Dr. Hazal Berfin Yilmaz is a physiotherapist and an Assistant Professor at Mudanya University. She obtained her Ph.D. in Physiotherapy and Rehabilitation from Bahçeşehir University. She held positions at various hospitals and medical centres in Türkiye between 2013 and 2025. During this period, her focus was on orthopaedic rehabilitation. Her academic interests include telerehabilitation, biomechanical assessment, lymphedema, sports rehabilitation, and orthopedic rehabilitation. She has contributed to national and international scientific publications, book chapters, and congress presentations, and continues her research on innovative approaches in physiotherapy.



**John Boyer**

Performance and Diagnostics Consultant at VALD, Dubai, UAE

## **Objective Measurement in Performance and Rehabilitation: Bridging Science, Technology, and Clinical Outcomes**

The field of physiotherapy and rehabilitation has traditionally relied heavily on subjective evaluation methods to guide clinical decisions and track progress. While clinical expertise remains central, advancements in objective measurement technologies now allow practitioners to quantify patient function with precision, reproducibility, and relevance to real-world outcomes.

This presentation will explore how objective testing platforms — such as force plates, dynamometry, movement analysis systems, and cardiorespiratory testing — can be integrated into both performance and rehabilitation settings. Case examples will illustrate how objective metrics, including strength asymmetry, balance stability, neuromuscular function, and power output, provide actionable data to guide interventions, monitor progress, and optimize return-to-sport or return-to-function pathways.

Special emphasis will be placed on the value of combining objective diagnostics with traditional physiotherapy approaches to improve patient outcomes and demonstrate measurable value to stakeholders such as athletes, clinicians, insurers, and healthcare organizations. By moving from subjective impressions to data-driven decision-making, physiotherapy can enhance both clinical credibility and patient engagement.

The session will conclude with a discussion on implementation strategies in diverse settings — from elite sports organizations to community rehabilitation clinics — and how objective measurement supports the broader mission of advancing physiotherapy as an evidence-based discipline.

### **Biography:**

John Boyer, DPT, is a physical therapist, performance scientist, and medical advisor specializing in performance, rehabilitation, and health technology. As a former professional basketball player with extensive experience rehab and sports science, he has worked with athletes, clinics, and organizations across Europe, the U.S., and the Middle East. John advises VALD Performance on objective measurement integration in MENA and serves as a medical advisor to various health-tech & precision health companies. His expertise spans human performance, diagnostics, and medical informatics, positioning him at the intersection of clinical outcomes, performance optimization, and applied technology.



**Teresa Vanlalpeki**

Zoram Medical College & Hospital, Falkawn, Mizoram, India

## Association between rural work practices and low back pain in Mizoram: a case-control study

**Background:** The Mizo people (Mizo hnam) are an ethnic group of north-eastern India, western Burma (Myanmar), and eastern Bangladesh. Agriculture is the mainstay and the major source of income and employment. Mizoram practices traditional subsistence agriculture as about half of the state's total population is involved.

**Objectives:** Primary objective is to identify the risk factors contributing to low back pain in the middle-aged working population of Mizoram.

**Methods:** The sample was collected from Presbyterian Church of India members of Mizoram in Aizawl District. The church secretary announced in church and the people who attended church between the age group of 40- 55 were given a questionnaire. Those replying to the questionnaire were included in the study.

**Data Analysis:** Data analysis was done using SPSS version 22.0 and significance was considered as  $p \leq 0.05$ , descriptive statistics and frequencies were taken. The odds ratio was calculated by weighting cases by frequency and crosstabs.

**Results:** A bamboo basket increase in hours/ week OR is more, >10 hours/week is 6.894. The load on the shoulder of carrying water is 2.356. People having more than one job versus no secondary job OR is 13.895, farming practices 2-4 hours/ day versus no farming practices OR is 9.579.

**Conclusion:** People having more than one job, farming practices, a long-standing, bamboo basket used for more hours per week, and mode of carrying water- load on the shoulder is at high risk.

**Keywords:** low back pain, back pain, risk factors, middle-aged, farmer, India, China, lumbago, sciatica pain, biomechanical factor

### Biography:

Teresa Vanlalpeki has completed her Bachelor and Master in Physiotherapy (MPT) in Community Physiotherapy from a well-known reputed Physiotherapy College – JSS College of Physiotherapy, Mysore, Karnataka, India. Currently pursuing Ph.D. at National Institute of Medical Sciences (NIMS) University, Jaipur, Rajasthan. She has published 2 papers in reputed journals and has been working as a physiotherapist in Zoram Medical College & Hospital (ZMCH) since 2023.



## **Gulshan Shahzadi**

Sheikh Khalifa General hospital Umm Al Quwain, UAE

# **Instrument Assisted Soft Tissue Mobilization**

## **Introduction**



## **IASTM, Graston Technique**

Instrument assisted soft tissue mobilization (IASTM) is a skilled myofascial intervention used for soft-tissue treatment.

It is applied using instruments that are usually made of stainless steel with edges and contours that can conform to different body anatomical locations and allows for deeper penetration. It is used for the detection and treatment of soft tissue disorders.

The technique itself is said to have evolved from Gua sha which is a method used in Chinese medicine.

## **How does it work?**

Instruments effectively break down fascial restrictions and scar tissue. The ergonomic design of these instruments provides the clinician with the ability to locate restrictions and allows the clinician to treat the affected area with the appropriate amount of pressure.

The introduction of controlled microtrauma to affected soft tissue structure causes the stimulation of local inflammatory response.

### **Clinical Benefits**

Studies have also showed clinical benefits of IASTM showing improvements in range of motion, strength and pain perception following treatment.

### **Benefits to the Therapist**

IASTM provide clinicians with a mechanical advantage, thus preventing over-use to the hands, it provides deeper tissue penetration with less compressive forces to the interphalangeal joints of the clinician's hand.

Also, it increases the vibratory perception of the physical therapist's hand holding the instrument to altered soft tissue properties such as tissues restrictions or adhesions. So, the therapist can detect soft tissue irregularities easier.

### **Types of Tools**



### **Graston instruments**

There are many companies for IASTM such as RockTape®, HawkGrips®, Graston®, Técnica Gavilán®, Functional and Kinetic Treatment with Rehab (FAKTR)®, Adhesion Breakers®, augmented soft-tissue mobilization or ASTYM®, and Fascial Abrasion Technique™. Each company has its own treatment approach with different instruments designs.

IASTM can be made from varying materials including stainless steel, titanium, plastic, buffalo horn, stone, quartz, and jade. The most common IASTM instruments used are stainless steel.

### **Practical Application**

IASTM can't be done by itself, it must be combined with motion and strengthening program to enhance the tissues remodeling.

### **When IASTM is applied to goes through 6 steps**

1. Examination
2. Warm-up is done for 10-15 mins by light jogging, elliptical machine, stationary bike or an upper body ergometer
3. IASTM, done at 30-60 degrees angle for 40-120 seconds
4. Stretching, 3 reps for 30 seconds

5. Strengthening, high repetitions with low load exercise
6. Cryotherapy, 10-20 min

### Biography:

Gulshan Shahzadi is born and brought up in UAE. Has completed her Bachelor of physiotherapy in 2015 and Master of Physical Therapy in 2020 from Gulf Medical University Ajman. She is topper with GPA score 4 and has high academic and research enthusiasm. Her keen interest in Cardiac Rehabilitation made her perform clinical trials and publish research in Physiotherapy Research International Journal on 06/07/2021 ( <https://doi.org/10.1002/pri.1919> ) with high clinical impact under the title Power walking based outpatient cardiac rehabilitation in patients with post-coronary angioplasty. She has been nominated as Speaker for various conferences earlier. Currently she is working at Sheikh Khalifa General Hospital, UAQ.

Recently she has learned dynamic release therapy Facia to function by Gary lag from USA. Dynamic Release is made from solid, non-porous stainless steel to prevent the transfer of pathogens. Each instrument features angled-grooved grips to ease and ensure maximum comfort for the practitioner's hands during treatment. It requires less pressure to detect and alters collagenous scar tissue, virtually eliminating bruising of the patient and further speeding the return to activity.

Today's presentation is based on how to use dynamic release therapy to release collagen bands on patients and athletes.



**Jose M Bueno Padilla**

Dubai, United Arab Emirates

## Experience at a RHB Performance Center Inside a Multispeciality Hospital in Dubai

Dubai is currently a worldwide sports hub with a growing sports community. From weekend warriors to professional athletes, as Sports Medicine Physicians we see a wide variety of reasons for consultation.

Sports Medicine is gradually increasing as specialty in the region, linked with fitness hubs, healthy culture and healthy habits, from padel to rugby, from runners to CrossFit athletes.

Not only covering athletes, but any other musculoskeletal injury/ or medical concerns, apart from Sports Medicine screening, exercise physiology, nutrition counseling, and interactions with many other specialties.

### Biography:

Dr Jose M Bueno Padilla has proven international experience in Sports and Exercise Medicine. As a former professional football player he early decided to specialize to understand why he was presenting many injuries himself. At the age of 26, started already as a Club Doctor at top League team in Spain, Atletico de Madrid. At the same time, collaborated and worked with different sports such basket, rugby and athletics with the Spanish Team, and the Spanish High-Performance Center. Then he joined Real Madrid, before joining Qatar National Football Team in 2018 for the upcoming World Cup project. Later on, he moved back to Spain to be with top League Real Betis Medical team. Currently he is having his medical practice in Dubai, attending different profile of patients, injuries, and Sports Medicine challenges every day.



**Alexander Tkachev**

Tkachev Spine Clinic, Russia

## Inflammation-Preserving Approach for Spontaneous Lumbar Disc Herniation Resorption: A Prospective MRI-Based Clinical Outcome Study

**T**his prospective observational study investigates a novel inflammation-preserving treatment strategy for acute lumbar disc herniation (LDH), excluding the use of NSAIDs or corticosteroids. Ninety symptomatic patients (mean age 48.6 years) underwent a non-invasive treatment protocol including gabapentin and 12 sessions of acupuncture. Follow-up MRIs were conducted every three months for one year, measuring changes in sagittal herniation size on T2-weighted images. Patients with <40% resorption continued treatment beyond 12 sessions. All patients demonstrated complete radiological resorption within one year (mean: 4.4 months). At 3 months, 21.1% already showed significant reduction. No surgical interventions were required. Pain (VAS-Leg) improved across all groups, with weak correlation to baseline herniation size or initial gabapentin use. This is the first prospective study to demonstrate 100% disc resorption using a treatment model that preserves the natural inflammatory phase, outperforming historical resorption rates (66.7%) seen in meta-analyses of conventional care. The findings suggest a paradigm shift: avoiding suppression of the acute inflammatory response may enhance the body's innate capacity to resolve disc pathology. This model offers a safe, drug-sparing, and cost-effective alternative for LDH management.

### Biography:

Alexander Tkachev, MD, is a neurologist, clinic founder, and spine rehabilitation specialist based in Moscow. He pioneered a non-invasive disc resorption protocol now used in thousands of patients. His work focuses on evidence-based alternatives to spine surgery. Dr. Tkachev actively collaborates with international research groups in MRI-based diagnostics and regenerative spine care.



**Ana Alexandra Anjos**

Fatima College of Health Sciences - Abu Dhabi , UAE

## Objective Assessment of Acupuncture: Effects by Microcirculation- Related Parameters in Patients with Proximal Femur Fracture

**OBJECTIVE:** The aim of this study was to demonstrate whether it is possible to objectively assess the effects of acupuncture by microcirculation- related parameters in the given clinical scenario, to evaluate the significance of the status of capillary perfusion prior to acupuncture for the treatment of a clinical cold pattern, and to evaluate the possible role of microcirculation- related parameters for the futures parameterization of the traditional Chinese medicine (TCM) diagnosis

**METHODS:** This prospective, uncontrolled, unblinded preliminary clinical trial included 32 elderly patients after surgical treatment for femoral fractures. For acupuncture treatment the patients received acupuncture with the "leopard spot technique" on the stomach meridian (Liangqiu, S34/ST34). Measurements of microcirculation- related parameters (velocity, blood flow, haemoglobin, oxygen saturation) by white light spectroscopy and laser Doppler were performed prior to and after acupuncture treatment

**RESULTS:** Two subgroups of patients after femur fracture could be identified: a low- and a high- perfusion group. Capillary flow velocity and blood flow were significantly augmented by acupuncture in the low-perfusion group only. In the high- perfusion group, there was no significant change of perfusion after acupuncture. The statistical analysis of all patient regardless of their pre-acupuncture perfusion status revealed no statistically significant alteration after acupuncture. The acupuncture effect may have been masked by the inhomogeneity of the overall group.

**CONCLUSION:** Microcirculation- related parameters may be valuable to measure acupuncture effects objectively and to characterize the vegetative functions prior to acupuncture so as to homogenize the comparison groups in clinical trials. In our example, a local cold pattern (low capillary perfusion of the leg) could be treated successfully by a pint which enhances qi and blood flow, whereas in heat pattern (high capillary perfusion) this intervention had no such effect. Future studies may be directed to correlated the vegetative status as measurable by TCM vegetative parameters with the key symptoms of TCM diagnosis.



## **Sedegheh Malek Mohammadi**

Orthotics and Prosthetics Research Clinic, Tehran, Iran

# **Rehabilitation Schedule through Plan of Investigation and Ultrasound Images**

**T**he objective of this research is to identify the specific and equivalent locations of the plantar fascia to plan the most effective rehabilitation schedule. It is believed functional role of the plantar fascia is dependent on its mechanical properties.

### **Method:**

1. To find equivalent anatomical landmarks of both feet in non weight bearing position.
2. To measure distances without palpation. (To reduce the percentage of the error of palpation).
3. To scan Ultrasound images in sagital and frontal planes. 4) To quantify the percentage of the body weight applied in indentified locations in static and dynamic situations.

The most effective rehabilitation schedule can be planed according to the biological properties of the body. Secondary problems can be decreased, also.

### **Biography:**

I am faculty of orthotics and prosthetics. My experience in the area of research, teaching in University, clinical experiments, measuring and reviewing papers is more than 28 years.

I have done research in the area of Orthotics and Prosthetics.

Additionally; I have done research in the area of plantar fascia qualities and its connection with the ankle and foot structure and function in living individual since 10 years ago. The aim is to collect data from living individual to schedule the rehabilitation, treatment and prevention program.

I have experience of working with Ultrasound machine to design a methodology to identify each location of the plantar fascia along its length and its equivalent location in the opposite foot to quantify the amount of the vertical load (body weight) applied in static and locomotion.

I have been reviewer in American Journal of Medical Sciences and Medicine.

I have been chief guest editor in American Journal of Sports Science and Medicine. (Open access peer reviewed), also.



## Prof. Masharawi Youssef, Mr. Miriam Reinstein, Mr. Asaf Weisman

Spinal Research Laboratory, Department of Physical Therapy,  
Stanley Steyer School of Health Professions, Gray Faculty of Medical and  
Health Sciences, Tel Aviv University, Israel

### Barefoot walking is beneficial for individuals with persistent plantar heel pain: A single-blind randomized controlled trial

**Background:** A lack of data exists about the effectiveness of active treatments for persistent plantar heel pain (PPHP). Objectives: To compare short-term functional and clinical effects of a 4-week barefoot or shod treadmill walking program for people with PPHP.

**Methods:** A single-blind clinical trial randomized 52 participants with PPHP into either a barefoot walking group (BWG), or a shod walking group (SWG). All participants received the therapeutic ultrasound. Outcomes were measured at baseline (t0), following 4 weeks of treatment (t1) and at 1 month follow-up (t2). The SF-36 functional questionnaire score was the main outcome. Secondary outcomes were self-reported and clinically assessed pain provocation levels, pressure pain thresholds and pain tolerance. Treadmill walking time and speed were measured at t0, t1, and people recorded the time spent walking each day in a diary. NIH trial registration no. NCT03677167.

**Results:** The BWG exhibited significant improvements in all SF-36 items (except "emotional well-being") ( $P < 0.05$ ), whereas the SWG exhibited improvements only in "pain" and "health change" items ( $P = 0.0001$ ; effect size: 0.13-0.94). Greater improvements were observed in the BWG than the SWG for "physical function" ( $p = 0.019$ ) and "role limitations due to physical health" items ( $p = 0.035$ ). Both groups demonstrated significant improvements in pain, with greater improvements in the BWG ( $P = 0.0001$ ; effect size: 0.89). Only the BWG showed significant improvements in pain pressure thresholds ( $P < 0.05$ ; effect size=0.70) and pain tolerance ( $P < 0.001$ ; effect size=0.67). Both groups significantly increased their speed and time spent walking on the treadmill (BWG:  $\Delta = 19.7$  minutes and  $\Delta = 1.7$  km/h; SWG:  $\Delta = 16.7$  minutes and  $\Delta = 1.1$  km/h) and time walking outdoors (SWG:  $\Delta = 38.2$  minutes/week; BWG: mean  $\Delta = 48.5$  minutes/week) ( $p < 0.001$ ). All clinical tests of pain were significantly less positive in the BWG at all time points ( $p < 0.05$ ).

**Conclusions:** Both walking programs benefited people with PPHP by alleviating pain and improving function and quality of life. Greater improvements were observed in the BWG than the SWG overall.

#### Biography:

Youssef Masharawi is an associate Professor and Head of the Master Program in the Physical Therapy Department at Tel Aviv University. Prof. Masharawi established the Spinal Research Lab for clinical and functional research projects concerning the spine and related conditions. He published more than 90 studies in leading peer-reviewed international Journals related to the Spine and musculoskeletal disorders. He teaches undergraduate and postgraduate physical therapy students about the clinical reasoning process and physiotherapy in the movement system and spinal form and function. He has supervised more than 30 Masters and PhD students.





# 13th World Congress on **Physiotherapy, Physical Rehabilitation & Sports Medicine**

October 06–07, 2025 | Dubai, UAE

**HYBRID EVENT**

**Zoom Meeting (GMT+4) Time Dubai, UAE**

**VIRTUAL KEYNOTE PRESENTATIONS**

**DAY 2**



**Mike Studer, PT, DPT, MHS, NCS, CEEAA, CWT, CSST, CSRP, CBFP, FAPTA**

Adjunct Faculty: Touro University Department of Physical Therapy, Las Vegas, Nevada 89140

Physical Therapy Instructor (PTI): University of Nevada Las Vegas (UNLV), 89140

## **Neurons that Error Together, Terror Together. Unlocking the mysteries in and rehabilitation for the Yips and other movement disorders in sport**

In his 1949 book, "The Organization of Behavior", Donald Hebb coined the now famous phrase, "neurons that fire together, wire together". As our understanding of Functional Neurologic Disorders (FNDs) has evolved, we have come to understand the similarities between the Yips, Twisties, Flikkikammo, Motare and the very changes described in Hebb's Theory. Advances in pain neuroscience, coupled with an improved understanding of FNDs brings us to an elevated time in rehabilitation of athletic FNDs (FND-A). This program will define the phenotypes and most importantly guide attendees in an evidence based yet applications-filled session including video case studies, references, and a framework for precision rehabilitation, including phenotype-specific, sport-specific and personalized clinical decision making.

### **Biography:**

Dr. Studer has been a PT since 1991, an NCS since 1995. Dr. Studer is an adjunct professor at Touro University and UNLV. Mike has been recognized as Clinician of the Year and appointed as a Fellow of the APTA. He has presented invited lectures in all 50 states and 14 countries across 5 continents and has authored over 45 articles, 7 book chapters, serving as a consultant to multiple professional and sponsored athletes. In 2024, Mike authored **The Brain That Chooses Itself**, a practical and applications-based guide to increasing both healthspan and lifespan for laypersons and medical professionals alike



**Silverio Di Rocca**

M.P.R International School Switzerland

## **Scientific Postural Assessment in Sports and Rehabilitation: A New Era with Posturometer**

In recent years, postural evaluation has evolved from a subjective art to a measurable science. This presentation introduces a groundbreaking method for assessing posture through the use of clinical posturometry, focusing on its application in both sports performance and functional rehabilitation. The Posturometer is an innovative diagnostic device that quantifies postural imbalances by analyzing the relationship between the craniofacial system and the global postural structure.

By integrating postural data with neuromuscular and proprioceptive feedback, clinicians can now objectively identify dysfunctions that often go unnoticed in traditional assessments. This opens new opportunities in preventive care, performance optimization, and long-term rehabilitation strategies.

We will present clinical cases demonstrating how the Posturometer enables interdisciplinary teams—including physiotherapists, dentists, osteopaths, and sports professionals—to design personalized and evidence-based treatment plans. This approach enhances functional outcomes and reduces relapse rates, particularly in high-performance athletes and complex patients.

Join us as we explore how this scientific postural assessment tool is transforming the way we evaluate and treat the human body—ushering in a new era where posture is no longer interpreted, but measured.





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**VIRTUAL ORAL PRESENTATIONS**

**DAY 2**



**Komal Ajaybhai Doshi**

School of Physiotherapy, RK University, Rajkot, Gujarat, India

## **CORESUNC" – An Innovative Audio-Visual Biofeedback Device to Evaluate Bridging Function and Back Extensor Muscle Strength in Patients with Stroke" – A Multiphasic Exploratory Study**

**BACKGROUND:** Trunk function plays an important role in activities of daily living (ADL) including locomotion, gait and sitting. Around 15% of stroke worldwide is the result of intra-cerebral hemorrhage. Trunk impairment is common in stroke population and various other neurological conditions.

**AIM:** To Design and develop an innovative Audio-Visual biofeedback device to evaluate bridging function and duration of bridge hold.

**METHOD:** Study was carried out in 3 phases: Phase 1: Designing and development of an innovative Audio-visual Biofeedback device [CORESUNC] by Electronic Engineer and industrial expert. Phase 2: Testing of an innovative Audio - visual Biofeedback device among healthy individuals to assess the efficacy of device. Phase 3: Testing of innovative audio-visual Biofeedback device on stroke patients to find out the reliability and validity of the device.

**RESULT:** ICC test was 0.998 for inter rater reliability of healthy individuals. ICC test was 0.973 for intra rater reliability of healthy individuals. Cronbach's alpha value for interclass reliability was 0.955 and for intraclass reliability was 0.947.

**CONCLUSION:** CORESUNC is a reliable and valid tool for evaluating bridging function and has many future scopes in muscle strength dynamics.

### **Biography:**

Dr. Komal Doshi is a PhD Scholar with Specialization in Musculoskeletal and Sports Sciences at School of Physiotherapy, RK University. She is Exam Coordinator and Board of Studies Member at RK University and a passionate educator who believes in making learning Fun for Students. With 8 Years of vast experience her focus is on Sports Rehabilitation and Innovative Technological advancements in the field. She is a certified Orthopedic Manual Therapist and a Certified Tapping Therapist. Deeply engaged with Hands on skills and Palpation techniques, she believes Physiotherapy is all about Magical Touch of Hands-on skills and Human Mechanics.



**Manali Viraj kamat**

Tata Memorial Hospital, Mumbai, India

## Co-relation between Muscle strength & Cancer related fatigue in advanced Lung Cancer in a Tertiary cancer hospital

**Background:** Cancer-related fatigue (CRF) is a prevalent and debilitating symptom among patients with advanced lung cancer, often impacting their physical function and quality of life. Muscle strength is a key determinant of physical performance, yet its relationship with CRF remains underexplored.

**Objective:** The study aims to evaluate the correlation between muscle strength and cancer-related fatigue in patients with advanced lung cancer. Additionally, it seeks to determine the relationship between physical function and cancer-related fatigue in this population.

**Method:** The data of 108 individuals diagnosed with advanced non-small cell lung cancer (NSCLC) will be collected using electronic medical record system of tertiary cancer hospital. Participants aged 18 years or above, with WHO performance status 0–2, and capable of completing self-reported questionnaires in English, Hindi, or Marathi were included. Patients who could not complete baseline physical fitness tests, were pregnant, or had conditions impeding ambulation were excluded. Outcomes included are cancer-related fatigue (measured via FACIT-F), physical performance (assessed via six-minute walk test), and muscle strength (measured using a spring balance for quadriceps, and a dynamometer for handgrip strength).

The study helps to evaluate correlations between muscle strength, physical function, and cancer-related fatigue, providing insights into the functional impact of CRF in patients with advanced lung cancers.

### Biography:

Dr. Manali Kamat, Senior Physiotherapist working in cancer care since last 18 years in a Premier cancer Institute (Tata Memorial Hospital). She is perusing masters in Orthopaedics from Vivekananda Global University, Jaipur, India. She has few publications in cancer rehabilitation mainly lung cancer, breast cancer.



**Amira Daher**

Zefat Academic College, Physical Therapy Department, Safed, Israel

## Psychological Stress and Its Association with Cervical Pain: An Observational Study

The coronavirus disease of 2019 (COVID-19) greatly affected people's lifestyles. We used an online, cross-sectional survey during a COVID-19-related lockdown in Israel, with the aim of investigating the effects of such lockdowns on students' self-perceived stress and neck pain (NP). College students (N=295) completed questions on sociodemographic characteristics, the Neck Disability Index (NDI), the Perceived Stress Scale, the Visual Analogue Scale (VAS), and NP frequency (four-point scale). Logistic regression models were calculated with the NDI as the dependent variable. In total, 35.6% of students experienced at least moderate NP-related disability ( $NDI \geq 15$ ), more during than before the lockdown. NP increased gradually, from a lifetime mean of 1.80 to a lockdown mean of 3.07 ( $\chi^2=316.72$ ;  $p<.001$ ). Students' self-perceived stress was moderate, and 59.3% reported experiencing study-related stress. Higher levels of self-perceived stress, study-related stress, sitting  $>3$  h/day, and a higher VAS score were associated with a higher risk of an  $NDI \geq 15$  (Nagelkerke's  $R^2=.513$ ,  $p<.001$ ). The transition from on-campus to online learning seems to have exacerbated students' NP, which was correlated to their study stress and lifestyles. These findings advocate for the need to promote the physical and mental health of students via e.g., mental health services and occupational and ergonomic consulting services.

### Biography:

Dr. Daher has completed her PhD at Haifa University and physical-therapy studies from Tel-Aviv University School of Medicine. She is a senior lecturer at physical-therapy department at Safed Academic College. She has published papers in reputed journals. The focus of her professional interest over the past 22 years has been musculoskeletal impairment, specifically neck-pain and its consequences.



**Shudir Baran Mazi**

Physical Education Teacher Haimchar Government College, Chandpur,  
Bangladesh

## **Bridging Wellness: The Synergy of Physical Education and Physiotherapy in Modern Healthcare**

In the evolving landscape of global health, physiotherapy and physical rehabilitation have emerged as indispensable tools in restoring mobility, function, and quality of life. However, sustainable recovery often requires a broader, community-integrated approach that extends beyond the clinical setting. This presentation proposes a fusion of modern physiotherapeutic practices with the foundational principles of physical education and localized rehabilitation models to maximize long-term patient outcomes.

Drawing upon field experiences from rural Bangladesh and international case studies, this session explores how community-based physical education programs can serve as preventive platforms—reducing musculoskeletal injury risks and supporting the reintegration of rehabilitated individuals into active, independent lives. The presentation highlights how culturally adapted movement routines, environmental familiarity, and physical literacy contribute to both the prevention and post-therapy maintenance of physical health, particularly in low-resource contexts.

Furthermore, emphasis will be placed on interdisciplinary collaboration among physiotherapists, educators, and local health workers to co-design rehabilitation strategies that address both physical and psychosocial dimensions of recovery. In the era of aging populations and rising chronic health conditions, a scalable and integrative model that combines physiotherapy with educational empowerment may offer a sustainable path toward global health resilience.

By integrating the evidence-based strengths of Physical Education and Physiotherapy, this presentation aims to inspire cross-disciplinary partnerships and policy innovations that position movement at the heart of wellness strategies—from school systems to senior care. Movement is not merely a response to illness—it is a proactive tool for building stronger, healthier, and more resilient communities.

### **Sub-Themes Covered**

- Rehabilitation in low-resource and rural settings
- Role of physical education in post-therapy recovery
- Movement therapy as a psychosocial tool
- Community engagement in physical rehabilitation
- Bridging traditional movement practices with modern physiotherapy

**K. M. Yacob**

Marma Health Centre, kaloor, Kochi, Kerala, India

## There is no pain when the center of the disc (nucleus pulposus) presses on the nerve. Instead, the pain will decrease

**Keywords:** Nerve, carry messages, Nucleus pulposus, re- produce, blood flow

Nerves carry messages from the brain to other parts of the body and back. Like telephone cables, nerves are built to carry messages, but arteries and veins are built to carry blood, like water pipes. Pressure or blockage in a vein or artery can reduce or stop blood flow. This can cause pain and numbness

Similarly, if the nerve that carries the messages is stressed or injured, the messages that pass through them, including pain, are reduced or blocked from reaching the brain. Because of this, the pain will never increase. Instead, the pain will lessen or disappear. Loss of pain sensitivity is common when nerves are cut and bruised after accidents or operations.

How can the average person recognize that the center of the disc(Nucleus pulposus) pressing on the nerve is not causing pain?

A major test of modern science to prove something is true is whether it can be reproduced.

The absence of pain when the center of the disc is pressed against the nerve is not only an individual human and non-human experience but can be reproduced by anyone.

Pressing on the nerve can recreate the fact that there is no pain. No nerve, including the sciatic nerve, experiences pain when pressed 100 times the pressure exerted by the disc.

The sciatic nerve is the largest nerve that starts in the buttock and runs down the back of the leg. In this nerve, I put on 50 kg and pressed for six months. I have no pain, numbness, or weakness. I've tried it on hundreds of my friends over the last 36 years, and not one of them has had pain or numbness from pressing on the nerve. The messages passing through their nerves were not interrupted.

The belief that the pain is caused by the soft nucleus of the disc pressing on the nerve is incorrect because modern science cannot reproduce the pain by pressing on the nerve.

The reason why the pain does not go away after the operation is because the pressure on the nerve does not cause pain.

I can have swelling in anyone's body, reduced blood flow, back pain, neck pain, and fever. All of these can lead to re-inflammation and death. Likewise, by doing the opposite, inflammation can increase blood flow and reduce or even eliminate back pain, neck pain, and fever.

It's no secret that anyone who has studied the various swelling types and forms I've discovered over the past 36 years can do this. It is an absolute scientific truth that pressing on a nerve does not cause pain.

If there is a mistake, deficiency, or incompleteness in what we say, there will be many unanswered questions and doubts. And a gap is felt between many things that do not fit together. But here all questions are answered without a doubt that pressing on the nerve will not cause pain.

The key question is whether surgical removal of the disc is the symptom of pain, the cause of the pain, the cause of the disease, or the disease itself. To answer this, you need to know the exact differences between them.



### Soheil Mansour Sohani

Iranian Center of Excellence in Physiotherapy, Rehabilitation Research Center,  
Physiotherapy Dept., School of rehabilitation sciences, Iran University of  
Medical Sciences, Tehran, Iran

## The effects of TECAR therapy on pain, range of motion, strength and subscale of HAGOS questionnaire in athletes with chronic adductor related groin pain: a randomized controlled trial

**Methods:** This study was a two arm parallel group's randomized sham-controlled superiority trial. A total of 22 male professional athletes (mean age 21.36 years) were randomly assigned to either the real TECAR therapy (n = 11) or sham TECAR therapy (n = 11) group, using block-balanced randomization. Both groups received stretching exercises. Intervention group received 10 sessions of TECAR therapy while, the control group received sham TECAR therapy. Primary outcome was pain that was measured by Visual Analogue Scale (VAS). Secondary outcomes included ROM, strength, and HAGOS questionnaire subscales. All outcomes were assessed at baseline, after 5 sessions, after 10 sessions, and one month after treatment. Analysis of Variance (ANOVA) and Analysis of Covariance were used to compare between-group mean differences.

**Results:** A total of 22 male athletes were included (11 in each group), with a mean age of 21.09 years in the TECAR group and 21.63 years in the sham group. TECAR therapy was associated with significant reductions in pain intensity across all evaluation sessions. Specifically, after 5 sessions, there was a large effect size for pain reduction ( $p = 0.01$ ); after 10 sessions, the effect was even larger ( $p = 0.001$ ); and at the 1-month follow-up, the pain reduction persisted ( $p = 0.001$ ). In terms of secondary outcomes, there was a significant improvement in hip adduction ROM at the 1-month follow-up ( $p = 0.03$ ).

**Keywords:** TECAR, Groin, Pain, Range of motion, Strength, HAGOS questionnaire

### Biography:

Soheil Mansour Sohani completed his BSc. In physiotherapy from TUMS, MSc. and Ph.D. from IUMS in Tehran, Iran. He is an associate professor and lecturer at Physiotherapy Dept., School of Rehabilitation Sciences, Iran University of Medical Sciences and Tehran, Iran. He had online presentation in past Online Conferences, October 28-29 2020, titled: "Shockwave Therapy: Radial vs. Focused" and April 12-13 2021, titled: "Radiofrequency in musculoskeletal pain" and October 15-16 2021, titled: "Mulligan concept of manual."



### **Elham Seihei<sup>1</sup>, Alireza Mollaei Barejhr<sup>2</sup>**

<sup>1</sup>Founder and Technical Director, Shahid Mohammad Sohrabi Center for Oral, Swallowing, and Nutrition Disorders, Bandar Abbas, Iran

<sup>2</sup> Student Research Committee, Shiraz University of Medical Sciences, Shiraz, Iran

## **Invention of an orthosis with the ability to maintain and control the range of motion of the head, spine, and shoulder joints, and electrical stimulation for strengthening the neck and shoulder muscles**

The protrusion of the jaw and tongue is the most common abnormal oral-motor pattern in infants and children. These patterns occur with the onset of movement in children and are followed by protruding extensor muscles. This problem is common in children with cerebral palsy, Down syndrome, dysarthria, and extensor muscle protrusions cause a lack of speech production, swallowing and eating dysfunction, drooling, and other disorders.

To use this device, the child should lean on it and maintain the device above their forehead and chin. It has two electrodes for electrical stimulation, which can help strengthen muscles through a specific functional faradic current. These electrodes are placed on the extensor muscles of the head and neck. This action will strengthen the muscles and improve the autonomic movements of the head and neck. Also, the vibrators are placed on the upper part of the shoulders and both sides of the neck. Additionally, the vibrators used in the device can generate heat.

This device can have many benefits for both the doctor and the patient, such as preventing the extensor muscles from protruding, maintaining and controlling the range of motion of the head, spine, and shoulders, which is possible without the presence of a therapist and... This device can prevent the protrusion of the extensor muscles and maintain and control the motion range of the head, the spine, and the shoulder joints in children, and it can put the minds of many parents at ease. (Patent No. In Iran: 74610)

### **Biography:**

I am Elham Seihei, a graduate in Speech Therapy, an inventor, and a researcher specializing in voice disorders and motor impairments in children. I have presented numerous papers at national and international conferences in both oral and poster formats and have received several international invention medals. I am a board member of the Young Entrepreneurs Association and the founder and director of a rehabilitation equipment manufacturing company at Hormozgan Science and Technology Park. Additionally, I serve as the director of a rehabilitation center specializing in oral disorders, swallowing, and nutrition.

**Mahmoud Yunusa Usman**

PhD student, University of Nigeria, Nsukka, Enugu, Enugu state

**Effects Of Aerobic Exercise On Brain-Derived Neurotrophic Factor Among Stroke Survivors  
(A Systematic Review And Meta-Analysis)**

**Background:** Brain-derived neurotrophic factor (BDNF) is a member of the neurotrophic family of proteins found in the peripheral and central nervous systems known to play significant roles in neuroplasticity. Expression of BDNF through physical exercise is associated with increased cognitive and executive functions. In this review, randomized controlled trials (RCTs) on the effects of aerobic exercise on BDNF among stroke survivors with mild cognitive impairment (MCI) were summarized and quantitatively analyzed.

**Design:** A meta-analysis.

**Methods:** RCTs were searched for changes in BDNF through aerobic exercise using the following databases (PubMed, Embase and Web of Science). Quality assessment and quantitative analysis were performed using RevMan 5.4. with standardized mean difference (SMD) and analyzed by Random effect model.

**Results:** Ten RCTs evaluated Cognitive status and serum BDNF in 240 stroke patients. There was a significant improvement of cognition and elevation of serum BDNF in the experimental group that performed aerobic exercise compared to the control group. Four of the RCTs were subjected to meta-analysis, the results suggest that there is a moderate level of heterogeneity among the included studies, as indicated by the  $I^2$  of 63% and the borderline significant Q-test(8.03) ( $p = 0.05$ ). The small  $\tau^2$  (0.03) indicates low between-study variance. The combined overall effect tested by the Z statistic(2.00) is statistically significant ( $p = 0.05$ ).

**Conclusions:** This review and meta-analysis show that Aerobic exercise has significance effect in the management of stroke patients with MCI, and the effect is mainly achieved as a result of increased circulation of serum BDNF.

**Key words:** BDNF, Aerobic exercise, stroke





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