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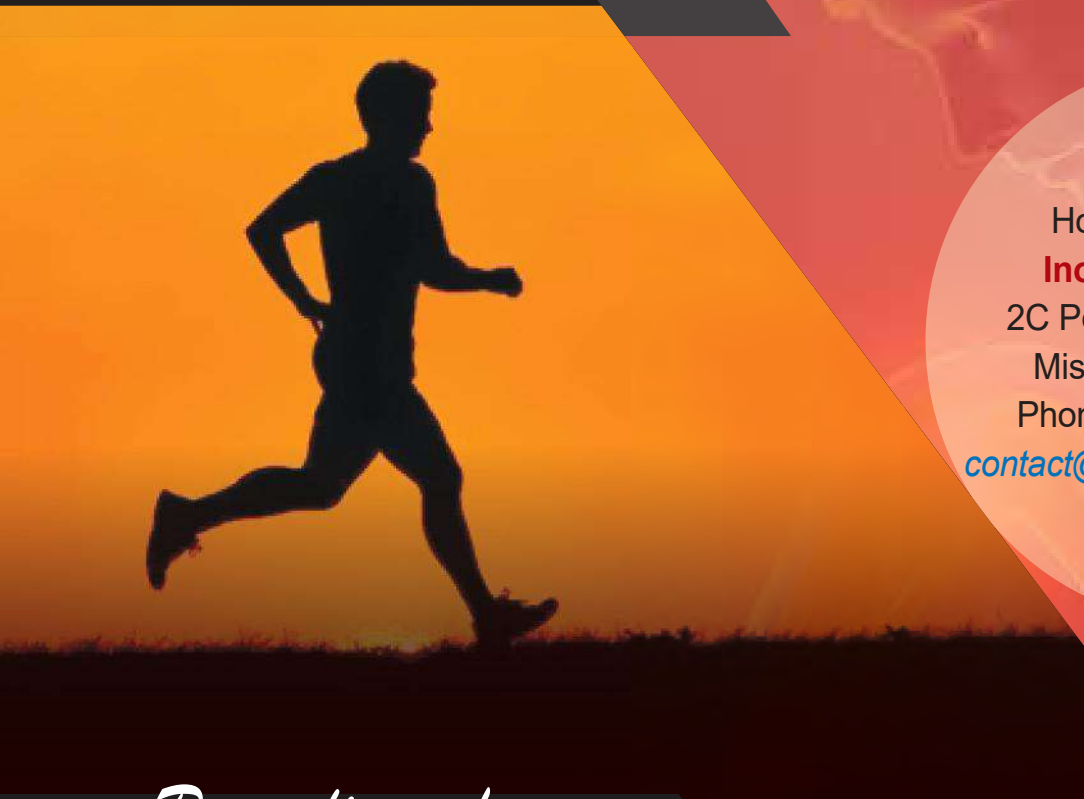

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Proceedings of

Global Congress on

PHYSIOTHERAPY, PHYSICAL REHABILITATION & SPORTS MEDICINE

April 22-24, 2019 | Dubai, UAE

Day 1 April 22, 2019

Grand Hall

08:00-08:45 – Registrations

08:45-09:00 – Opening Ceremony

Keynote Forum

09:00-09:40

Title: Postural adaptation in cerebellar disorders

***Raymond Chong**, Augusta University, USA*

09 :40-10:20

Title: Celebrity physical therapist expands into India

***Karena Wu,** ActiveCare Physical Therapy, NYC, USA/Mumbai, India*

10:20-11:00

Title: Postural Torsion Syndrome Algorithm (PTSA) as a predictor of musculoskeletal health

***Armia Abdo**, AZA Health & Wellness LLC, USA*

Group Photo

Networking and Refreshments Break 11:00-11:20 @ Dagat Dagatan Restaurant

11:20-12:00

Title: Diagnostik and treatment procedures acc. Czech School of Physiotherapy

***Dagmar Pavlu**, Charles University, Czech Republic*

Sessions

Physical Therapy Science | Sports & Physiotherapy | Physical Activity | Advancement in Physiotherapy | Rehabilitation Methods | Experimental techniques in Physiotherapies | Physical Medicine & Rehabilitation | Artificial Physiotherapy Methods

Session Chair: **Raymond Chong**, Augusta University , USA

Session Co-Chair: **Dagmar Pavlu**,Charles University, Czech Republic

12:00-12:25	**Title: Cardiac Rehabilitation: The emerging role of home-based approaches and telemedicine**
	***Samer Ellahham**, Cleveland Clinic, Abu Dhabi, UAE*
12:25-12:50	**Title: Effectiveness of dry needling in the treatment of shoulder conditions – using Ultrasonography as a diagnostic technique**
	***Diana Pinto**, Physiotherapy, Nutrition and Pain Management Center, India*
12:50-13:15	**Title: Rehabilitation of stroke survivors with severe disabilities: An UK perspective**
	***Sushmita Mohapatra**, University of Nottingham, UK*

Lunch Break: 13:15-14:15 @ Dagat Dagatan Restaurant

14:15-14:25	**Title: A comparison of flexi-bar and non-flexi-bar exercises Effect on balance, walking speed and fall risk in older women**
	***Vilma Dudoniene**, Lithuanian Sports University, Lithuania*

14:25-14:50	**Title: Prescription and strategies to Increase the adherence of sedentary adults to exercise**
	***Erwah Alnablsi**, Life Kinesis Institute, UAE*
14:50-15:15	**Title: Profile of LeFA soccer players injury prevention and rehabilitation strategies**
	***Rethabile Nkuna**, Sefako Makgatho Health Sciences University, South Africa*

Networking and Refreshments Break: 15:15-15:30 @ Dagat Dagatan Restaurant

15:30-15:55	**Title: Impact of dietary protein intake, physical activity on urinary creatine and urinary creatinine excretion in a team-sports**
	***Nabeela Mansuri**, Sports Nutrition, Breach Candy Hospital ,India*
15:55-16:20	**Title: The Impacts of improper body posture on office workers' Health: Analysis and prevention of chronic injuries**
	***Hani H. Al-Nakhli**, Madinah Specialist Hospital, KSA*
16:20-16:45	**Title: The effect of upper extremities massage on reaction time and anticipatory skill in male athletes**
	***Mohammadreza Kasnavi**, Shahid Beheshti University of Medical sciences, Iran*
16:45-17:10	**Title: Support for School-Based Physical Activity Framework in Gauteng Special Schools, South Africa**
	***Muziwakhe D. Tshabalala**, University of Pretoria, RSA*
17:10-17:35	**Title: Utilization of memory foam insole as shoe modification to decrease foot pain of a track and field athlete in Saint Dominic College of Asia**
	***Charen C Rabe**, Saint Dominic College of Asia, Philippines*

Panel Discussion

Day 2 April 23, 2019

Grand Hall

Sessions

Kinesiology and Biomechanics | Physiotherapy methods and Instrumentation | Vitamins & Dietary Supplements | Rehabilitation Methods| Physiotherapy in Treatment & Care | Experimental techniques in Physiotherapies | Manual & Manipulative Therapy | Womens Health & Palliative Care

Session Chair: **Armia Abdo**, AZA Health & Wellness LLC ,USA

Session Co-Chair: **ActiveCare Physical Therapy**, NYC, USA/Mumbai, India

09:00-09:25	**Title: Early intervention proposal assisting special needs children and empowering families**
	***Ashraf Abd ElGhafar Saad**, Step Up Therapy Services, PLLC, USA*

Workshop

09:25-10:10	**Title:The use of anti-inflammatory modalities in musculoskeletal healing**
	***Karena Wu,** ActiveCare Physical Therapy, NYC, USA/Mumbai, India*
10:10-10:35	**Title: The effectiveness of rehabilitation service among cancer patients at King Fahad medical city in Saudi Arabia**
	***Amani AlJohi**, Rehab Hospital , King Fahad Medical City ,KSA*
10:35-11:00	**Title: Clinical practice and effectiveness of kinesio taping for lower limb musculoskeletal disorder: A systematic appraisal**
	***Mohammed R. Alkassim**, Medical Department of Royal Saudi Land Forces, KSA*

Networking and Refreshments Break: 11:00-11:15 @ Dagat Dagatan Restaurant

11:15–11:40	**Title: Assessment and treatment of pelvic girdle pain**
	***Mais Ali Jawhari**, Jordan University of Science and Technology, Jordan*
11:40–12:05	**Title: Different type of Oral Rehydration Solution (ORS) developed from germinated cereals and pulses flour**
	***Gulnaaz Shaikh**, Chief Dietitian, Noor Hospital, India*
12:05–12:35	**Title: Malfuctioning of Ligaments**
	***Shweta Sachin Ramteke**, Karama Medical Center, UAE*
12:35–13:00	**Title: Contents of physiotherapy interventions for management of low back pain in India – A survey**
	***Ektaben Soni**, Ashok and Rita Patel Institute of Physiotherapy- CHARUSAT, India*

Lunch Break: 13:00-13:45 @ Dagat Dagatan Restaurant

13:45–14:10	**Title: The "smart insole": A pressure-sensing and vibrating insole to improve compliance in individuals with excessive foot pronation**
	***Lili Silumesii**, Physiotherapist, Zambia*
14:10–14:35	**Title: Dissecting the pain experience- a person centered approach to treating non-traumatic musculoskeletal pain**
	***Khoren Iskenderian**, New Body Synergies, Australia*

Workshop

14:35–15:20	**Title: Impact of dietary protein intake, physical activity on urinary creatine and urinary creatinine excretion in a team-sports**
	***Nabeela Mansuri**, Sports Nutrition, Breach Candy Hospital, India*

Networking and Refreshments Break: 15:20-15:35 @ Dagat Dagatan Restaurant

15:35–16:10	**Title: Radiofrequency in musculoskeletal pain**
	***Soheil Mansour Sohani**, Iran University of Medical Sciences, Iran*
16:10–16:35	**Title: Dual task performance and executive function in physically under active and physically active elderly: a comparison**
	***Priyanka Parate,** Revive Health Physiotherapy and Ergonomic Clinic, India*
16:35–17:00	**Title: Effects of retrowalking on osteoarthritis of knee in geriatric population**
	***Deepti N. Wadhwa**, MVP'S College Of Physiotherapy, India*
17:00–17:25	**Title: Effect of positional release therapy and taping on unilateral upper trapezius tender points**
	***Poonam Mogal**, Consultant Physiotherapist at HAL Hospital, India*
17:25–17:50	**Title: Effects of Cupping Therapy**
	***Amir Hariti**, Sports Physiotherapist, France*

Poster Presentations @ 17:50-18:10

P 01	**Title: The role of gluteus medius muscle in stabilizing the knee joint during jumping and landing on unstable surface**
	***Balazs Sebesi**, University of Pecs, Hungary*
P 02	**Title: Changes in the antagonist muscle co-activation after damaging the agonist muscle with isokinetic exercise**
	***Adam Fesus**, University of Pecs, Hungary*
P 03	**Title: Frontal plane neurokinematical mechanisms of knee joint and pelvis stabilization during unilateral vertical jump**
	***Matyas Varga**, University of Pecs, Hungary*

B2B Networking & Panel Discussion

Awards & Closing Ceremony

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Scientific Meetings

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KEYNOTE FORUM

Day 1

Raymond Chong
Augusta University, USA

Postural adaptation in cerebellar disorders

The ability to flexibly adapt one's postural orientation and equilibrium is important for sports and activities of daily living. One method of studying postural adaptation is to perturb the sensorimotor set of subjects and observe how they adapt their response. In Experiment 1, we applied somatosensory conditioning by having subjects stand blindfolded on a toes-up inclined surface for several minutes (inclined phase) followed by stance on a level surface (post-inclined phase). In healthy adult subjects, a range of postural adaptation was observed in the post-inclined phase. On one extreme, responder subjects showed a large aftereffect of the prior inclined stance by leaning their body forward. Non-responder subjects did not display the aftereffect. Instead, they remained standing upright. Individuals diagnosed with a cerebellar disorder adapted normally but all presented with high postural sway variability during the post-incline phase. In Experiment 2, subjects stood on a surface which moved, causing them to react so as not to lose their balance. Somatosensory conditioning was induced by moving the platform backwards for seven consecutive trials followed by seven rotation (toes-up direction) trials. Maintaining balance during the backward translations required gastrocnemius muscle activations while toes-up rotations induced tibialis anterior muscle activities. In healthy subjects, these muscle activities are decreased when subjects lightly touched a rigid immovable support with their fingertips. Cerebellar subjects however, showed hypermetric responses to the platform perturbations and with higher variability in onset latency and response amplitudes when compared to control subjects. The hypermetric responses indicate that the cerebellum is critically involved in modulating postural muscle gain in response to platform perturbations, more specifically in tuning down muscle responses. It remains to be studied whether long-term somatosensory conditioning is an effective method of rehabilitation to decrease the variability of onset latency and response amplitude in subjects with a cerebellar disorder.

Biography

Raymond Chong is the Chair of the Department of Interdisciplinary Health Sciences as well as the director of the Applied Health Sciences PhD program. He completed his PhD in 1997 from the University of Oregon. He is the lead author in over 60% of his papers. He is a regular reviewer for the US Veteran Affairs Research department and also serves on the editorial board of several journals including Gait & Posture.

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Karena Wu
ActiveCare Physical Therapy, NYC, USA/Mumbai, India

Celebrity physical therapist expands into India

Over one year ago, NYC celebrity physical therapist, Dr. Karena Wu brought her best-rated clinic, ActiveCare Physical Therapy from NYC to Mumbai. Known for her appearances on Dr. Oz, CNN, CBS, NBC, FOX and much more, Dr. Wu established her brand into Mumbai. Her practice philosophy involves a holistic view and top notch detail. She recognized a lack of advanced therapies, especially when it came to high level assessments and appropriate therapeutic techniques. "Once I heard that there was a lack of treatment options in India I knew I had to help. We want the people in Mumbai and the surrounding areas to have the same access to care that we have here in the U.S.", Wu said. Dr. Wu's family background in eastern medicine combined with her western training allows her to bring a unique perspective in the care of each patient. She has multiple years of experience in private practice as a clinician and business administration as an entrepreneur. Healthcare is not only about clinical care, it incorporates administration, marketing and networking on a local, regional and global scale. As the first female physical therapist honored with the title of AVP (Association of Volleyball Professionals) Medical Director, her work in professional beach volleyball has given her information on professional sports and the healthcare industry in America on a national level. Dr. Wu has also worked internationally with Canadian kinesiology tape company, SpiderTech as their Director of Education. As a current Fellow in Training with the Maitland Australian Physiotherapy Seminars (MAPS) Orthopedic Manual Therapy Fellowship Program, she promotes continued education and training worldwide. Dr. Wu's practice methodology is an advanced skill that being brought to the international forum for the betterment of each patient.

Biography

Karena Wu is Owner and Clinical Director of ActiveCare Physical Therapy in NYC and Mumbai. Originally from Los Angeles, California, she has been in private practice in NYC for over 18 years. She has a Masters of Science degree in Physical Therapy from Columbia University and a Doctor of Physical Therapy degree from Temple University. She is a Board-Certified Clinical Specialist in Orthopedic Physical Therapy. She is a Certified Orthopedic Manual Therapist, Strength and Conditioning Specialist, Kinesiology Tape Practitioner and Pilates Instructor. She is Medical Director of the Association of Volleyball Professionals and is used as a healthcare expert on local and national TV in America. She is currently a Fellow in Training at the Maitland Australian Physiotherapy Seminars Orthopedic Manual Therapy Fellowship Program.

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Notes:

Armia Abdo
AZA Health & Wellness LLC, USA

Postural Torsion Syndrome Algorithm (PTSA) as a predictor of musculoskeletal health

Currently in the United States healthcare model, treatment occurs after the patient becomes symptomatic. Waiting until we recognize the problem by patient complaints limits our capacity for quality physical and mental health. With this model, the US spends more on healthcare per capita than every other nation. In Physical Therapy, developing proper preventive healthcare will require screening tools effective in identifying predictors of pain and injury. Our current tools render themselves ineffective, because they only measure function, which is too variable for accurate assessment . Nevertheless, these inadequate tools are the standard practice for determining a need for skilled interventions and insurance coverage. Musculoskeletal health depends upon the body's ability to support itself under gravity by way of efficient form. The loss of this efficiency results in a predictable collapse due to constant gravitational force; creating the foundation for Postural Torsion Syndrome Algorithm (PTSA). Gravitational biology dictates, "As a consequence, all biological processes are accustomed to the ever-present force of gravity and even small variations in this force can have significant impact on the health and function of organisms." These disease processes that result from a failure in our musculoskeletal system (MSS) are not limited to the MSS but will result in a myriad of pathologies effecting all other systems. PTSA is a musculoskeletal screening tool that uses a 5-point system measuring a specific angle of hypomobility in twenty key articulations on each side of the body (Figure 1).

Hypomobility Scale	% Health	Hypomobility
0	100	Normal/NA
1	75	Minimal
2	50	Moderate
3	25	Significant
4	0	Immobile

Figure 1: 5-point hypomobility scale

These articulations are susceptible to gravitational forces and can collapse when gravities forces exceed their thresholds for sustaining structural integrity. As a result, these articulations are key drivers of posture and movement. Limitations can be measured in a way that reflect the group dysfunction of that region. This measurable dysfunction can be used to predict injury and serve as a guide to justifying preventative care. (Figure 2).

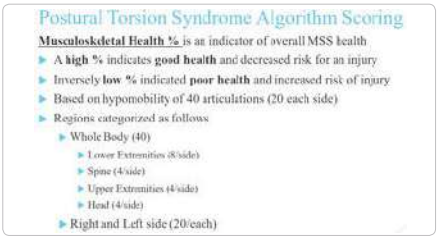

Figure 2: 5-point hypomobility scale interpretation

Recent Publications

1. *Catling (2014). Astrobiology: A Very Short Introduction (Very Short Introductions)*
2. *Bureau of Labor Statistics - http://1.usa.gov/1uCQQXn*
3. *Cuddy, A. J. C., Wilmuth, C. A., Yap, A. J., & Carney, D. R. (2015). Preparatory power posing affects nonverbal presence and job interview performance. Journal of Applied Psychology, 100(4), 1286-1295.*

Biography

A passionate health care practitioner, business owner, executive, author, and instructor in a passionate pursuit of spreading health and wellness on a broad scale. A dynamic leader with an intimate knowledge of the body, health, and well-being through a variety of experiences.

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Dagmar Pavlu
Charles University, Czech Republic

Diagnostik and treatment procedures acc. Czech School of Physiotherapy

Study of physiotherapy enjoys a relatively long tradition in the Czech Republic. Owing to the scientific and technical progress it has however experienced a number of changes that have been substantially reflected in the associated legislation as well. The presentation – in first part - points out experiences gained in connection with the newly introduced process of lifelong learning and especially accreditation process of physiotherapy as a field of study. In the second part of presentation most important diagnostic and treatment procedures, on which based physiotherapeutical education system in Czech Republic, will be discussed and demonstrated. Specialy will be underlined functional assessment and treatment approach according to Janda. In the last part of presentation a contribution to evidence-based-physiotherapy, in application of sensorimotor training, will be demonstrated and on example of EMG research documented.

Recent Publications

1. *Pavlů D, Pánek (2007) D. EMG analysis of muscle fatigue by senzorimotor training - a contribution to evidence based physiotherapy. International Journal of Rehabilitaition Research. 2007, 30:105.*
2. *Janda V., Vávrová, M., Herbenová, A., Veverková, M. (2017) Sensorimotor Stimulation. In Liebenson, C.: Rehabilitation of the Spine. Williams and Wilkins, pp.513-531.*
3. *Pavlů, D. (2003) Special physiotherapeutical methods (in Czech). Cerm, Brno, 239p.*

Biography

Pavlu's primary interests are in the physiotherapy and clinical kinesiology. She is an Associate Professor at Charles University, Faculty of Physical Education and Sport (UK FTVS) and is a guarantor of study programmes in physiotherapy at the faculty. She was a president of the professional organisation - Physiotherapists of the Czech Republic (till 2014) and between 2004 – 2008 she was a vice chairman of ER WCPT (European Region of World Confederation for Physical Therapy). She is a Member of Executive Board of Association of Rehabilitation and Physical Medicine in the Czech Republic. She is the author of two monographs and more than 150 special articles in journals. She is the head of one part of the Progress research project at UK FTVS. Her current research interests include analysis of the effect of physiotherapeutical methods.

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Notes:

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Global Congress on

Physiotherapy, Physical Rehabilitation and Sports Medicine

April 22-24, 2019 | Dubai, UAE

Scientific Tracks & Abstracts

Day 1

Day 1 April 22, 2019

Sessions:

Physical Therapy Science | Sports & Physiotherapy | Physical Activity | Advancement in Physiotherapy | Rehabilitation Methods | Experimental techniques in Physiotherapies | Physical Medicine & Rehabilitation | Artificial Physiotherapy Methods

Session Chair: Raymond Chong, Augusta University , USA
Session Co-Chair: Dagmar Pavlu, Charles University, Czech Republic

Session Introduction

Title: Cardiac Rehabilitation: The emerging role of home-based approaches and telemedicine

***Samer Ellahham**, Cleveland Clinic, Abu Dhabi, UAE*

Title: Effectiveness of dry needling in the treatment of shoulder conditions – using Ultrasonography as a diagnostic technique

***Diana Pinto**, Physiotherapy, Nutrition and Pain Management Center, India*

Title: Rehabilitation of stroke survivors with severe disabilities: An UK perspective

***Sushmita Mohapatra**, University of Nottingham, UK*

Title: A comparison of flexi-bar and non-flexi-bar exercises Effect on balance, walking speed and fall risk in older women

***Vilma Dudoniene**, Lithuanian Sports University, Lithuania*

Title: Prescription and strategies to Increase the adherence of sedentary adults to exercise

***Erwah Alnablsi**, Life Kinesis Institute, UAE*

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Title: The effect of upper extremities massage on reaction time and anticipatory skill in male athletes

***Mohammadreza Kasnavi**, Shahid Beheshti University of Medical sciences, Iran*

Title: Support for School-Based Physical Activity Framework in Gauteng Special Schools, South Africa

***Muziwakhe D. Tshabalala**, University of Pretoria, RSA*

Title: Utilization of memory foam insole as shoe modification to decrease foot pain of a track and field athlete in Saint Dominic College of Asia

***Charen C Rabe**, Saint Dominic College of Asia, Philippines*

Cardiac Rehabilitation: The emerging role of home-based approaches and telemedicine

Samer Ellahham
Cleveland Clinic, Abu Dhabi, UAE

Outpatient cardiac rehabilitation programs provide supervised exercise training in addition to secondary prevention interventions. They are designed to speed recovery from acute cardiovascular events, benefit chronic patients and to improve quality of life. Alternative approaches to the delivery of supervised cardiac rehabilitation include home-based programs, disease management and lifestyle health coaching interventions, and other internet-based case management systems. The effectiveness of home-based programs was evaluated in several randomized trials. There was no evidence of a difference in mortality, reinfarction, revascularization, cardiac-associated hospitalization, or exercise capacity between the two modes of intervention. Other alternatives include community-based group programs and the use of telemedicine. Use of mobile health technologies may further expand cardiac rehabilitation availability. Telehealth exercise cardiac rehabilitation appears to be at least as effective as center-based cardiac rehabilitation in improving modifiable cardiovascular risk factors and functional capacity. It identifies the option of telehealth and the technologic advances to provide more comprehensive, responsive, and interactive interventions for individuals for whom center-based rehabilitation is not feasible. The attractiveness of telemedicine models is the potential to improve participation of patients in structured with its short term and long-term benefits.

Biography

Dr.Ellahham is a Board-certified internist, cardiologist and vascular medicine senior consultant and continues to care for patients. He received his undergraduate degree in biology and his M.D. from the American University of Beirut. He did his fellowship in Cardiology at the Medical College of Virginia (MCV) in USA. After completing his fellowship, Dr. Ellahham worked in Washington DC in several clinical and leadership positions before moving to UAE in 1988. He led the First AHA GWTG Heart Failure Initiative outside US and was the recipient of the AHA GWTG Award in Wash. DC. His clinical passion and expertise is in the field of heart failure management. He demonstrated great skill and experience in the management of patients with heart failure and led a multi-disciplinary team in the care and delivery of advanced therapies to these patients. He has unique abilities to partner and engage local and regional referring providers. He is able to work in a highly matrixed environment, possess strong leadership and organizational skills and have experience to working effectively in a large health system. He is currently a Cleveland Clinic Staff and the member of Executive Team of The Cleveland Clinic Foundation, in Abu Dhabi, UAE.

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Notes:

Effectiveness of dry needling in the treatment of shoulder conditions – using Ultrasonography as a diagnostic technique

Diana Pinto
Physiotherapy, Nutrition and Pain Management Center, India

The use of Dry Needling as a treatment tool in Shoulder conditions has been used sparingly. An extremely mobile joint like the shoulder requires prompt intervention and treatment for effective outcomes. In our current study we have studies a range of Shoulder conditions from Calcifications, Tendinosis, Tears and Bursitis to view the effect of Dry Needling on the recovery status of these conditions. Ultrasonography of the Shoulder, Cyriax Shoulder assessment tool and a DASH assessment tool has been used to assess the condition of the shoulder before and after the treatment sessions.

Biography

Diana Pinto is a Physiotherapist working in India at the Physiotherapy, Nutrition and Pain Management Clinic, Mumbai. She has completed her MS Biokinesiology from the University of Southern California. She has also completed her Specialisation in Personal Training and Sports Performance Nutrition. She has been a Dry Needling Practitioner for over 7 years now.

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Notes:

Rehabilitation of stroke survivors with severe disabilities: An UK perspective

Sushmita Mohapatra
University of Nottingham, UK

About 50% of all stroke survivors in the UK remain severely disabled (mRS ≥ 4) depending on healthcare services, even though, 22% survive a severe stroke (NIHSS >10). Although overall functional improvement is evidenced after a severe stroke, the impacts of rehabilitation are unclear with only limited objective data available on functional recovery. As a consequence, provision of rehabilitation post-hospital discharge remains vague. Several variables influence the process determining suitability for rehabilitation after stroke, however, decision-making in practice for rehabilitation was under-documented. In addition, caregivers' experiences of rehabilitation for severe stroke survivors was not explored. The purpose of the study was to investigate hospital-based decision-making for provision of rehabilitation post-stroke for people with severe disabilities, measure patient-recovery in the first six months and investigate the pathway of care from caregivers' perspective.

Methods: Qualitative data were collected using semi-structured interviews with hospital staff and caregivers of stroke survivors with severe disabilities. Patient outcomes were measured for severe stroke survivors and rehabilitation provided was recorded over the first six months post-stroke using an observational design. Qualitative and statistical analysis was completed for respective datasets and triangulated for final interpretation.

Results: Rehabilitation for stroke survivors with severe disabilities was evidenced as disjointed and lacking a client-focus, despite a complex process of decision-making. 69% of the cohort improved significantly with functional abilities in the first six months with a noticeable involvement of healthcare professionals. Rehabilitation was valued by caregivers, although, mistrusts on the healthcare system was evident.

Conclusions: The evidence of a significant functional improvement in severely disabled stroke patients is valuable in guiding the effective use of rehabilitation resources. The potential complexity in decision-making and inadequacies in the provision of rehabilitation services highlighted the need for incorporating service users' knowledge in shaping future models of care for severe stroke survivors and their caregivers.

Recent publications:

1. Kulnik TS, Mohapatra S, Gawned S & Jones F(2018): Managing the severely impaired arm after stroke: a mixed-methods study with qualitative emphasis. Disability and Rehabilitation, DOI: 10.1080/09638288.2018.1539777
2. Mohapatra, S; Jones (2016). A predictive tool for discharge destination and outcomes in stroke survivors admitted to a hyper acute stroke unit. British Journal of Neuroscience Nursing 12(Sup5):S12-S18. DOI: 10.12968/bjnn.2016.12.Sup5.S12
3. Mohapatra, S; Jones (2015), A. The Orpington Prognostic Scale: A predictive tool for discharge destination and outcomes in stroke survivors admitted to a hyper acute stroke unit; International Journal of Therapy & Rehabilitation; Nov2015, Vol. 22 Issue 11, p510
4. Mohapatra S, Walker M F, Sackley C, Chouliara N, Fisher RJ(2018): Longitudinal measurement of functional recovery in stroke survivors with severe disabilities (Poster), UKSF, December 2018, Telford.
5. Mohapatra S, Walker M F, Sackley C, Chouliara N, Fisher RJ(2018) : Rehabilitation of severe stroke survivors: The caregivers' experience. (Poster), UKSF, December 2018, Telford.
6. Cormican A, Mohapatra S. (2018). Categorization tool: A way forward for optimizing clinical hours in a hyper acute set up? (Poster), UKSF, December 2018, Telford.

Biography

Sushmita Mohapatra is a senior rehabilitation professional and researcher in stroke rehabilitation, currently working as Clinical Lead Therapist for Stroke & Neuro Rehabilitation at Kings College Hospital London. Her expertise lies in her specialist skills in evaluation and provision of best quality, evidence based care in the field of neurological rehabilitation, including neuro splinting and vocational rehabilitation. She is passionate about improving health care through innovative research. She has years of experience in field in clinical practice, education with an early career in research. Her area of research mainly focuses on improving rehabilitation services in the area of severe disabilities after stroke using mixed method approaches. She endeavors to incorporate stroke survivors and service users' perspectives in research studies to develop innovative clinical practice solutions in stroke rehabilitation.

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A Comparison of Flexi-Bar and Non-Flexi-Bar Exercises Effect on Balance, Walking Speed and Fall Risk in Older Women

Vilma Dudoniene
Lithuanian Sports University, Lithuania

Background: Falls are one of the major causes of mortality and morbidity in older adults. The major risk factors are impaired balance and gait, polypharmacy, history of previous falls, advancing age, and female gender. Regular involvement in moderate physical activity reduces falling risk. Whole body vibration exercise provides strong sensory stimulation that can activate the muscle spindles and strengthen the proprioceptive senses, strengthening the muscles that are essential for postural stability. The vibration characteristic of the flexi-bar creates a strong proprioceptive stimulation, which has a significant effect on the movement perception.

Aim: To assess the effects of flexi-bar and non-flexi-bar exercises on balance, walking speed and fall risk in community dwelling women 65-89 years of age.

Methods: Participants (n=22) of the study were randomly divided into two groups. The subjects of the research group (n=11) underwent balance improvement program using Flexi-bars and the subjects of the control group (n=11) were prescribed the same exercise program with non-flexi-bars (wooden sticks). All women before and after 8-week intervention executed 4 stance balance test, functional reach test, 10 metres walking test, timed up-and-go test, and filled Desmond's fall risk questionnaire.

Results: All women who participated in the study had an increased risk of falling. Comparison of the results before and after the 8-week physiotherapy program demonstrated statistically significant improvement in the 4-stance balance test ($p<0.05$) in both groups, but there were no statistically significant differences between the groups. Statistically better ($p<0.05$) results achieved Flexi-bar exercise group to compare to non-flexi-bar group in functional reach test, 10 metres walking test, and timed up-and-go test.

Conclusions: Exercises with flexi-bars were more effective in reducing risk of falling in older women than exercises with wooden sticks.

References:

1. Ambrose, A. F., Paul, G., Hausdorff, J. M. (2013). Risk factors for falls among older adults: a review of the literature. Maturitas, 75(1), 51-61.
2. Bogaerts, A., Verschueren, S., Delecluse, C., Claessens, A. L., & Boonen, S. (2007). Effects of whole body vibration training on postural control in older individuals: a 1 year randomized controlled trial. Gait & posture, 26(2), 309-316.
3. Chung, J. S., Park, S., Kim, J., Park, J. W. (2015). Effects of flexi-bar and non-flexi-bar exercises on trunk muscles activity in different postures in healthy adults. The Journal of Physical Therapy Science, 27: 2275–2278.
4. Howe, T. E., Rochester, L., Neil, F., Skelton, D. A., Ballinger, C. (2011). Exercise for improving balance in older people. Cochrane Database of Systematic Reviews, 9(11), DOI: 10.1002/14651858.CD004963.pub3
5. Kim, J. H., So, K. H., Bae, Y. R., & Lee, B. H. (2014). A comparison of flexi-bar and general lumbar stabilizing exercise effects on muscle activity and fatigue. Journal of physical therapy science, 26(2), 229-233.

Recent publications:

1. Dudonienė, Vilma; Lendraitienė, Eglė; Požėrienė, Jūratė. Effect of vibration in the treatment of children with spastic diplegic cerebral palsy / Vilma Dudoniene, Egle Lendraitiene, Jurate Pozeriene // Journal of vibroengineering : JVE. Kaunas: JVE International Ltd. ISSN 1392-8716. 2017, vol. 19, iss. 7, p. 5520-5526. <http://www.jvejournals.com/Vibro/article/JVE-18250>.
2. Lendraitienė, Eglė; Bagdonaitė, Dovilė; Petruševičienė, Daiva; Dudonienė, Vilma; Lendraitis, Vitas. The effectiveness of different physical therapy techniques for relieving pain and increasing neck range of motion in patients with diagnosed

latent myofascial trigger points // Orthopedic & muscular system: current research. New York: OMICS Publishing Group. ISSN 2161-0533. 2017, vol. 6, iss. 4, p. 1-6. <https://www.omicsonline.org/open-access/the-effectiveness-of-different-physical-therapy-techniques-forrelievingpain-and-increasing-neck-range-of-motion-in-patients-with-2161-0533-1000246.pdf>.

3. Skurvydas, Albertas; Mamkus, Gediminas; Kamandulis, Sigitas; Dudonienė, Vilma; Valančienė, Dovilė; Westerblad, Håkan. Mechanisms of force depression caused by different types of physical exercise studied by direct electrical stimulation of human quadriceps muscle // European journal of applied physiology. New York: Springer. ISSN 1439-6319. 2016, vol. 116, iss. 11, p. 2215-2224. <http://link.springer.com/article/10.1007%2Fs00421-016-3473-0>.
4. Dudonienė, Vilma; Varnienė, Lina; Aukstikalnis, Tomas; Lendraitienė, Eglė; Čerkauskas, Justas; Raistenskis, Juozas. Effect of vibroacoustic therapy on pain management in adolescents with low back pain // Journal of vibroengineering : JVE. Kaunas: JVE International Ltd. ISSN 1392-8716. 2016, vol. 18, iss. 7, p. 4729-4735. <http://www.jvejournals.com/Vibro/article/JVE-17165.html>.

Biography

Vilma Dudoniene is Assoc. Prof. and physiotherapy teacher with MSc and PhD degrees at Lithuanian Sports university. Her teaching experience is more than 20 years. She participates in various projects for Nordic and Baltic countries, as well as in the activities of European Network of Physiotherapy in Higher education. Her practical expertise is in the field of Aqua therapy working with pregnant women, infants, toddlers, and children; research area – musculoskeletal interventions with the focus on injury prevention and health promotion.

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Notes:

Prescription and strategies to increase the adherence of sedentary adults to exercise

Erwah Alnablsi
Life Kinesis Institute, UAE

At present, physical inactivity is considered by the most prestigious researchers in the field of health and sports sciences as one of the main public health problems of the 21st century. The populations that we call "special", that is, that have characteristics that differentiate them from the others, are very sensitive to inactivity. Overprotection, fear or ignorance make sedentary groups such as diabetics, hypertensives or disabled who would benefit much from a prescription of physical exercise adapted to their characteristics and possibilities. The benefits of physical activity for health are evident, but not all population groups respond similarly to exercise, nor can the intervention be planned in the same way. Nor is it known with certainty the type, duration and intensity of the practice of physical exercise more convenient for each age group or specific group of population, being necessary works and projects that focus their priority in solving and clarifying these gaps.

Biography

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Osoria HL, Blauwet CA. Sports Med Rep. 2017
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Shad BJ, Wallis G, van Loon LJ, Thompson JL. Maturitas. 2016

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Notes:

Profile of LeFA soccer players injury prevention and rehabilitation strategies

Rethabile Nkuna
Sefako Makgatho Health Sciences University, South Africa

The researcher observed that Lesotho Football Association teams do not have a strategies for the prevention, management and rehabilitation of soccer injuries. The development of such a strategies may be of economic and soccer developmental benefits to the league. The study aim was to determine strategies for injury prevention and rehabilitation of LeFA soccer players. A descriptive profile was done using a validated questionnaire to determine the preventative and rehabilitation strategies used for LeFA soccer players. The questionnaire was developed following focus group discussions comprising 68 items was used. The standardized questionnaire comprising 68 items had a reliability of $\alpha = 0.772$ on the Chronbach's alpha. Thirteen soccer teams comprising 322 players participated. The mean age of participants was 24.66 ± 3.84 years. Mean years played in premier league were 4.54 ± 3.61 years. Approximately half, 157 (48.8%) participants were full time employed and 18.6% are schooling. All players do not use protective equipment during training and all players only access rehabilitation from physiotherapists during national games or would have to go privately which is unaffordable. Health professionals available during games were mainly physiotherapists 247 (76.7%), and a medical doctor 75 (23.3%). Over a third (35.1%) of players were returned to play after rehabilitation by a physiotherapist, the medical doctors returned 39.1%, and about a fifth (21.7%) were self-returned to sport. Two thirds (66.8%) of players reported to have had adequate rehabilitation. There was a statistically significant difference on the equipment usage and level of education ($F\ 3,318) = 6.83$, $p<0.0001$ among LeFA players. The study have seen that the level of education the players had didn't influence the good practice of wearing soccer equipment at all times when playing. Most players are returned to play by the physiotherapist and the doctor.

Biography

Rethabile Nkuna is a PhD student and lecturer at Sefako Makgatho Health Sciences University in South Africa. Her interest in is Sports Medicine whereby she had been a physiotherapist for the national soccer squad of Lesotho. Currently she focusing on lecturing Gender Based health and Cardiopulmory Rehabilitation to undergraduate Physiotherapy students. Her research activities include supervising undergraduate students and postgraduate students registered for Masters degree in Physiotherapy.

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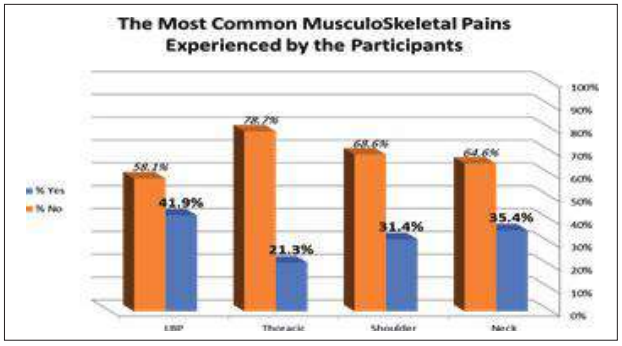
Notes:

Impact of dietary protein intake, physical activity on urinary creatine and urinary creatinine excretion in a team-sports

Nabeela Mansuri
Sports Nutrition, Breach Candy Hospital, India

Creatine and Creatinine plays a role in muscle function. Urinary creatine and urinary creatinine concentration was measured in order to see significance in monitoring athlete and athlete's performance. Evaluate association of dietary protein intake and physical activity on urinary creatine, urinary creatinine concentration in different team sports [cricket players (C), basketball players (B) and football players (F)]. A total of 62 players from different team sports - C (n-20), B (n-17) and F (n-25) age of 18-30 years were participated. Post training urine samples was analyze by difference in the creatinine present before and after heating with acid solution urinary creatine was obtained.



Using Jaffe's reaction and absorbance read spectrophotometrically at 520nm urinary creatinine was obtained.24 hour dietary recall was consider.Positive correlation between urinary creatine and dietary protein per day, dietary protein according to body weight per day was found ($r = 0.013$, $p<0.001$), ($r=0.000$, $p<0.005$) respectively. Negative correlation between urinary creatinine and dietary protein according to body weight per day and duration of practice per day was found ($r = 0.000$, $p<0.001$), ($r = 0.035$, $p<0.005$) respectively. Urinary creatine mean (SD) values- C group 78.63 ± 27.17, B group 102.65 ± 38 and F group 169.60±41.58.Urinary creatinine mean (SD) values- C group 46.60 ± 37.23,B group 84.88 ± 48.27 and F group 70.40±44.083. Significant increase was seen in urinary creatine excretion with respect to dietary protein per day, dietary protein according to body weight per day. Urinary creatine excretion is more in football players followed by basketball players. Significant decline was seen in urinary creatinine excretion with respect to increase dietary protein according to body weight per day and increase duration of practice.Urinary Creatine excretion is more in basketball players followed by football players. Urinary creatine and urinary creatinine excretion depends on sports-type, duration of sports and protein consumption.

Recent publications:

1. Matilda Steiner-Asiedu et al (2017) Urine creatinine and anthropometric indices of sportsmen and women. Biomed Biotechnol Res J 2017;1:134-40
2. I. Bezrati-Benayed et al (2014) URINARY CREATINE AT REST AND AFTER REPEATED SPRINTS IN ATHLETES: A PILOT STUDY. Biol Sport 31(1): 49–54.
3. Giuseppe Banfi (2010) SERUM CREATININE CONCENTRATIONS IN ATHLETES: ARE THEY NORMAL? Brazilian Journal of Biomotricity v. 4, n. 3, p 157-164.

Biography

Nabeela Mansuri has expertise in the field of diet, nutrition and exercise. Knowledge in diet, nutrition and exercise help in improving the health and wellbeing. Immensely contribute her work for sports, cancer and diabetes this are few area where right guidance for food, exercise is needed depending on individual physical, mental, social, cultural, economical status.

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The Impacts of improper body posture on office workers' Health: Analysis and prevention of chronic injuries

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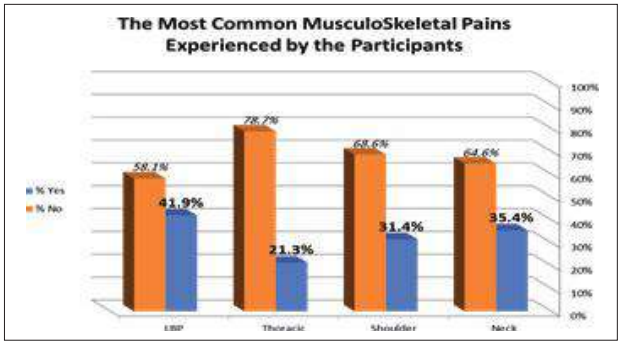

Increasing rates of musculoskeletal disorders among the working community have been encountered. These health-related complications are considered to be amongst the leading causes of disability, and limitation of motion within modern office workers. Many of these disorders are commonly caused by improperly accommodated or designed workplaces. However, office caused injuries have not yet received the required attention in the Middle Eastern working community. The purpose of this study was to detect and prevent office related injuries by investigating their associations with improper workstation ergonomics. This was conducted within the framework of studying the current situation of office ergonomics with focus on sitting postures. The study employed a thirty- item questionnaire distributed to more than one thousand randomly selected workers. This questionnaire was developed to better study the personal demographics, medical information, muscular pain, physical therapy history, workstation ergonomics, and sitting practices of the participants. The continuation of the data collection process was performed by conducting two randomized crossover trials (within- subjects) consisting of twenty-four individuals. This trial hypothesized significant variations of the subjects' heart rates and blood pressures in accordance with different postures and workloads. Sitting posture was found to have significant effects on the studied vital signs. The results also indicated that approximately 78% of the participants experienced some sort of muscular pain, however more than 65% of them never visited a physical therapy clinic. The study also showed that 74% of the total number of participants were either supplied with ergonomically inconvenient workstations, or were not occupying their workstations correctly. Raising the awareness of the population regarding the importance of workplace ergonomics is a must; after highlighting the risks of improper sitting postures, and lack of treatment.

Recent publications:

1. Work-related musculoskeletal disorders and ergonomic risk factors in special education teachers and teacher's aides. Hsin-Yi Kathy Cheng, Man-Ting Wong, Yu-Chung Yu, Yan-Ying Ju. 2016, BMC Public Health.
2. Occupational sitting behaviour and its relationship with back pain – A pilot study. RolandZemp, Michael Fliesser, Pia-Maria Wippert, William R.Taylor, Silvio Lorenzetti. 2016, Applied Ergonomics, Vol. 56, pp. 84-91.
3. The Prevalence, Risk Factors and Consequences of Neck Pain in Office Employees. Fatemeh Ehsani, Zahra Mosallanezhad, Ghazaleh Vahedi. 2, 2017, Middle East Journal of Rehabilitation and Health, Vol. 4.

Biography

Al-Nakhli is currently working as a Physical Therapy Consultant at Al-Madinah Specialist Hospital. He has held a variety of positions during his endeavor, one of which was the Head of the Physical Therapy and Rehabilitation Department at the Madinah Maternity & Children's Hospital (MMCH), in addition to several other leadership positions. He is also a primary member of the Rehabilitation Education and Training Committee at the Ministry of Health in KSA. He received his Doctor of Philosophy Degree (PhD) in Rehabilitation Science from Loma Linda University in California on 12/2011. During that period (and onwards), he worked on a number of research proposals, and had several scientific articles published in his area of expertise.

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The effect of upper extremities massage on reaction time and anticipatory skill in male athletes

Mohammadreza Kasnavi
Shahid Beheshti University of Medical sciences, Iran

Neurocognitive system has a crucial role in planning physical behavior and coordination, sports performance. Neurocognitive tasks such as measuring the reaction time and anticipation skills have been used in various studies. Therefore, in every sport and activity that the athlete needs accurate and rapid action used to make decision, boosting anticipation skills and reaction time can be effective in the improvement of motor control and central information processing. In addition, according to the effects of massage on the neurocognitive functions the effects of massage on reaction time and anticipation skills were studied.30 men athletes, participated in this study. According to the selection criteria, the participants were randomly divided to 2 experimental and control groups of fifteen members with the experimental group being given a massage. The participants' reaction time of auditory choice, complex choice reaction times and visual choice, complex choice and high and low speed anticipation were checked with Speed Anticipation Reaction computer tests. This study showed that there were significant differences between two groups in the mean difference of auditory choice , complex choice reaction times and visual choice , complex choice reaction times ($p<0.05$). No significant differences between two the groups in high and low speed anticipation were observed ($P>0.05$).The massage therapy program used in this study helped the experimental group athletes have better and shorter time reaction compared to the control group. This study showed that applying massage techniques has positive effects on boosting and more proper function of cognitive nervous system. The above mentioned techniques can be used as valuable tools in physiotherapy in order to foster athletes' Physical actions.

Biography

Mohammadreza Kasnavi, Mcs of physical therapy at the 28 years old from shahid beheshti university of tehran , Iran. This study was financially supported by a grant from the Postgraduate Studies and Research Program, Shahid beheshti University of Medical Sciences.

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Notes:

Support for School-Based Physical Activity Framework in Gauteng Special Schools, South Africa

Muziwakhe D. Tshabalala
University of Pretoria, RSA

Statement of the Problem: The National Association for Sport and Physical Education (NASPE) recommends that children should accumulate a total of 120 minutes of physical activity daily. The recommendation stipulates that 60 minutes should be free-play and 60 minutes structured or adult-led activities. Researchers reported that children with cerebral palsy (CP) present with a wide spectrum of physical abilities and without support will not achieve recommended daily physical activity levels. The purpose of this study is to describe the support for school-based physical activity framework that will improve the physical activity levels and patterns of children with CP in Gauteng Special Schools. Methodology: A mixed methodology study comprising focus group discussions and an intervention was conducted. Findings: The support for school based physical activity framework that speaks to the curriculum, activity differentiation and adaptation as posited by the national department of education and key stakeholders is recommended. Conclusion & Significance: Support for School-Based Physical Activity Framework is the overarching theme that emerged from a total of 152 direct and 478 aggregated coding references resulting from 11 direct and 15 aggregated coded items representing the FGDs. Four themes which are: Partnership and Collaboration, Peer Support, Enabling Environment and Teacher-Learning Support Material as portrayed by figure 1 mind-map below merged to develop the overarching theme. The support for school based physical activity framework speaks to the curriculum, activity differentiation and adaptation as posited by the national department of education that is informed by key stakeholders. Recommendations are made for interventions that focus on inclusion, activity differentiation and adaptation to improve the physical activity levels and patterns of children with CP.

Recent publications:

1. Asih S, Neblett R, Mayer TG and Gatchel RJ (2018). Does the length of disability between injury and functional restoration program entry affect treatment outcomes for patients with chronic disabling occupational muscular disorder? Journal of Occupational Rehabilitation 28: 57 – 67.
2. Bax M. (2010). Terminology and classification of cerebral palsy. Developmental Medicine and Child Neurology 6: 295 – 297.
3. Capio CM, Sit CHP, Abernethy B and Rotor ER (2010). Physical activity measurement instruments for children with cerebral palsy: a systematic review. Developmental Medicine and Child Neurology 52(10): 908 – 916.
4. Carlon SL, Taylor NF, Dodd KJ and Shields N (2013). Differences in habitual physical activity levels of young people with cerebral palsy and their typically developing peers: a systematic review. Disability and Rehabilitation 35(8): 647 – 655.

Biography

Muziwakhe Tshabalala is a PhD candidate at the University of Pretoria and a Senior Lecturer at Sefako Makgatho University. He has worked at Special Schools for children with disabilities and has served as a consultant to the Gauteng Department of Education in South Africa working with the Deputy Chief Education Specialist of Physiotherapy. He has facilitated workshops and presented many Physiotherapy courses.

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Notes:

Utilization of memory foam insole as shoe modification to decrease foot pain of a track and field athlete in Saint Dominic College of Asia

Charen C Rabe
Saint Dominic College of Asia, Philippines

Memory Foam molds to the body in response to heat and pressures, distributing body weight evenly. It conforms to the body and distribute the weight in way that allows the entire body to be supported. The shoe Insole is a removable shoe insert that worn in a shoe for warmth to improve the fit. Foot pain is a conditions may due to inflammation involving any of the bones, ligaments or tendons in the foot , and also due to prolong standing and walking The utilization of Memory foam insole(MFI) as a shoe modification for people suffering for foot pain,when using it as an insoles it returns to its original shapes when you apply a force since its elastic and quickly molds to your unique contours. Your weight distribution on your foot spead more evenly and the pressure is relieve on places as well. To decrease foot pain for athletes that engage in track and field events improve performance, and prevent further foot debilitaing condition that hinder their activities of daily livings. The method used is true-experimental and purposive sampling. The T-test is used to test the significant difference between two variable means .The first group will be wearing the memory foam insole (MFI) as insole the second group used an ordinary foam insole(OFI) and both groups is also use regular commeciallly available insoles(CAI) for another ten days for atleast four hours a day.The collection of data are done every other day.. The researchers use the Modified Foot Function Index (MFFI)for evaluation of foot pain. The MFFI demonstrates that MFI, OFI and CAI has mean average of 1.5 , 1.95 and 2.12 respectively with the one-tailed critical t-value of 1.83 at a 0.05 level of significance and a degree of freedom of 9. There is a significant difference on using the MFI to CAI with a t-stat values for Foot Pain (2.43), therefore the null Hypothesis is rejected And for MFI as to to OFI a T stat value of foot pain(1.71) The Null hypothesis is accepted This shows evidence thatMFI is effective in decreasingfoot pain as to CAI .

Biography

Charen Rabe is the BSPT student from Saint Dominic College of Asia.

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Notes:

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Scientific Meetings

Global Congress on

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April 22-24, 2019 | Dubai, UAE

Scientific Tracks & Abstracts

Day 2

Day 2 April 23, 2019

Sessions:

Kinesiology and Biomechanics | Physiotherapy methods and Instrumentation | Vitamins & Dietary Supplements | Rehabilitation Methods| Physiotherapy in Treatment & Care | Experimental techniques in Physiotherapies | Manual & Manipulative Therapy | Womens Health & Palliative Care

Session Chair: Armia Abdo, AZA Health & Wellness LLC ,USA
Session Co-Chair: Karena Wu, ActiveCare Physical Therapy, NYC, USA/Mumbai, India

Session Introduction

Title: Early intervention proposal assisting special needs children and empowering families

***Ashraf Abd ElGhafar Saad**, Step Up Therapy Services, PLLC, USA*

Title: The effectiveness of rehabilitation service among cancer patients at King Fahad medical city in Saudi Arabia

***Amani AlJohi**, Rehab Hospital , King Fahad Medical City ,KSA*

Title: Clinical practice and effectiveness of kinesio taping for lower limb musculoskeletal disorder: A systematic appraisal

***Mohammed R. Alkassim**, Medical Department of Royal Saudi Land Forces, KSA*

Title: Assessment and treatment of pelvic girdle pain

***Mais Ali Jawhari**, Jordan University of Science and Technology, Jordan*

Title: Different type of Oral Rehydration Solution (ORS) developed from germinated cereals and pulses flour

***Gulnaaz Shaikh**, Chief Dietitian, Noor Hospital, India*

Title: Malfuctioning of Ligaments

***Shweta Sachin Ramteke**, Karama Medical Center, UAE*

Title: Contents of physiotherapy interventions for management of low back pain in India – A survey

***Ektaben Soni**, Ashok and Rita Patel Institute of Physiotherapy- CHARUSAT, India*

Title: The "smart insole": A pressure-sensing and vibrating insole to improve compliance in individuals with excessive foot pronation

***Lili Silumesii**, Physiotherapist, Zambia*

Title: Dissecting the pain experience- a person centered approach to treating non-traumatic musculoskeletal pain

***Khoren Iskenderian**, New Body Synergies, Australia*

Title: Dual task performance and executive function in physically under active and physically active elderly: a comparison

***Priyanka Parate**, Revive Health Physiotherapy and Ergonomic Clinic, India*

Title: Effects of retrowalking on osteoarthritis of knee in geriatric population

***Deepti N. Wadhwa**, MVP'S College Of Physiotherapy, India*

Title: Effect of positional release therapy and taping on unilateral upper trapezius tender points

***Poonam Mogal**, Consultant Physiotherapist at HAL Hospital, India*

Title: Effects of Cupping Therapy

***Amir Hariti**, Sports Physiotherapist, France*

Early intervention proposal assisting special needs children and empowering families

Ashraf Abd ElGhafar Saad
Step Up Therapy Services, PLLC, USA

A recent study in the Middle East found that 5-10 percent of children under 18 years old had at least one type of disability, with the most common being speech, motor, and mental disabilities. Our mission is to help these children and their families get the help they need, in order for the children to grow up and function normally in society. The first step in this process is to enroll the child in the program, and a number of people have a role in doing this. The child's parents and teachers must take the appropriate action if they notice the child has a delay or are concerned about anything in the child's behavior. A service coordinator will sit with the family and evaluate their needs. The child will then be evaluated by a number of therapists, including speech therapists, physical therapists, occupational therapists, and psychologists. Once a child is determined to be eligible for services, a committee will come up with an individual therapy plan based on the child and the family's needs. This plan is reviewed and updated every year based on the child's development and improvement. With the support system this program provides, we can help our children reach their full potential.

Biography

Ashraf Abdelghafar Saad is a Doctor of Pediatric Rehabilitation he graduated from Cairo University School of Medicine, department of Physical Therapy with a bachelor's degree in 1989. He worked in Cairo University Hospital until 1996, and then he moved to the United States of America. He completed master's degree in physical therapy from Rocky Mountain University. He provided services including physical therapy, occupational therapy, psychotherapy, vision, hearing aids, social workers, special instructors, and evaluations for more than 1200 children every year. In 2008, New York State provided me with an opportunity to run a 4410 program for children 3-5 years of age. Our mission was to continue to work with and provide services for under-served children in the Middle East and in impoverished areas in the State. Currently, he is founder and owner of Step Up Therapy Services.

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Notes:

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Workshop

Day 2

The Use of Anti-Inflammatory Modalities in Musculoskeletal Healing

Karena Wu
ActiveCare Physical Therapy, NYC, USA/Mumbai, India

Physical Therapists are specialists in musculoskeletal care. They are more intimately involved in the care of their patients due to the frequency of visits in rehabilitation. In the United States, 50+ states allow patients to access a physical therapist directly. This emphasizes the need for physical therapists to be more medically and pharmacologically sound. Unfortunately, evidence exists that many physical therapists lack the knowledge of basic inflammatory processes and the effects of anti-inflammatory modalities. This research commentary reviews the mechanism and type of injury and inflammatory processes and the administration and effects of various pharmacological musculoskeletal treatments. This publication was authored by Dr. Karena Wu and Dr. Chris Showalter.

Biography

Karena Wu is Owner and Clinical Director of ActiveCare Physical Therapy in NYC and Mumbai. Originally from Los Angeles, California, she has been in private practice in NYC for over 19 years. She has a Masters of Science degree in Physical Therapy from Columbia University and a Doctor of Physical Therapy degree from Temple University. She is a Board-Certified Clinical Specialist in Orthopedic Physical Therapy through the American Physical Therapy Association. She is a Certified Orthopedic Manual Therapist, Strength and Conditioning Specialist, Kinesiology Tape Practitioner and Pilates Instructor. She is Medical Director of the Association of Volleyball Professionals and is used as a healthcare expert on local and national TV in America. She is currently a Fellow in Training at the Maitland Australian Physiotherapy Seminars Orthopedic Manual Therapy Fellowship Program.

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Notes:

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Scientific Tracks & Abstracts

Day 2

The effectiveness of rehabilitation service among cancer patients at King Fahad medical city in Saudi Arabia

Amani AlJohi
Physical Therapy, Rehab Hospital, King Fahad Medical City, Saudi Arabia

A cancer patient under treatment might have experience activity intolerance or possible system impairment as an effect of cytotoxic and/or radiotherapies. The importance of rehabilitation referral among cancer clients had been emerging since then as part of care coordination among health care providers, yet only a few studies were generated focused on oncology rehabilitation management. The purpose of this study is to know the effectiveness of rehabilitation service among cancer patients in improving individual functionality level. The purpose of this study is to know the effectiveness of rehabilitation service among cancer patients in improving individual functionality level.

Method: A retrospective study was conducted to review a database of cancer patient's rehabilitation referrals from Comprehensive Cancer Center to the Rehabilitation Hospital in King Fahad Medical City from January 2012 to December 2017 using an electronic file record reviewer. Demographic information and patient length of stay were reviewed as a secondary data source. The Functional Independence Measurement (FIM) tool was utilized to determine physical and mental restrictions from the time of admission and prior to discharge to determine the outcome of rehabilitation management.

Result: Thirty-seven eligible records were reviewed. Thirty-one files had a complete FIM records and six was excluded because of inadequate data; a total response rate of 84%. Fifty-eight percent was composed of male patients and 42% was female; hematology case was 17 and oncology case was 14. The age mean± SD was 49.41±16.52 years. The percentage of readmission back to Comprehensive Cancer Center was 9.7%. In comparison, the admission mean±SD FIM assessment for motor capacity was 35.81±12.82 then prior to discharge was 58.10±18.29; cognitive capacity upon admission was 33.94±3.31 then prior to discharge was 34.48±2.20. In summary, the FIM mean±SD upon admission was 69.74±14.17 then prior to discharge was 92.58±19.17 with P value of <0.0001.

Conclusion: Cancer patients had benefited rehabilitation program in terms of improvement in functional independence. This program might be applied in all medical disciplines requiring rehabilitation management to serve a needy population special consideration should be consider with this complex cases.

Recent publications:

1. Mutrie, N., Campbell, A. M., Whyte, F., McConnachie, A., Emslie, C., Lee, L., ... & Ritchie, D. (2007). Benefits of supervised group exercise programme for women being treated for early stage breast cancer: pragmatic randomised controlled trial. Bmj, 334(7592), 517.
2. Hunter, E. G., & Baltisberger, J. (2013). Functional outcomes by age for inpatient cancer rehabilitation: A retrospective chart review. Journal of Applied Gerontology, 32(4), 443-456.
3. Young, Y., Fan, M. Y., Hebel, J. R., & Boult, C. (2009). Concurrent Validity of Administering the Functional Independence Measure (FIM™) Instrument by Interview. American journal of physical medicine & rehabilitation/Association of Academic Physiatrists, 88(9), 766.
4. Alfano, C. M., Ganz, P. A., Rowland, J. H., & Hahn, E. E. (2012). Cancer survivorship and cancer rehabilitation: revitalizing the link. Journal of Clinical Oncology, 30(9), 904-906.
5. Ries, L. A. G., Eisner, M. P., Kosary, C. L., Hankey, B. F., Miller, B. A., Clegg, L., ... & Edwards, B. K. (2007). SEER Cancer Statistics Review, 1975–2000. Bethesda, MD: National Cancer Institute; 2003. Google Scholar.

Biography

Amani AlJohi has has her expertise in acute physical therapy service cardiac and oncology rehabilitation at King Fahad Medical City , in Riyadh, KSA since 2008. In addition, she is part of the palliative team and presented different topic about barriers of advance cancer rehabilitation and non-pharmacological cancer pain management in cancer pain management symposium 2016. Presented poster abstract in 5th international disability conference in "Barriers In Cancer Rehabilitation At KFMC: Perspectives Of Healthcare Professions" .she built with team the caregiver training program at model of care in ministry of health in KSA.

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Clinical practice and effectiveness of kinesio taping for lower limb musculoskeletal disorder: A systematic appraisal

Mohammed R. Alkassim
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Kinesio tape (KT) is a proprietary product that purports to offer a range of benefits in the treatment and prevention of various musculoskeletal conditions. Kinesio taping involves the application of elastic adhesive tape to areas of pain or dysfunction. Ithas a diversemechanisms of action including reduction of pain through stimulation of sensory afferents and increased range of motion (ROM) due to enhanced local circulation. Despite a recent increase in its public profile due to use of KT by athletes at major sporting events, the clinical benefits of the intervention remain unclear. The main objective of thisSystematic Appraisal (SA) is to review a clinical practice and level of effectiveness of KT application for lower limb musculoskeletal disorders. Electronic databases including Cinahl, Nora, Web of Science, Cochrane and Medline were searched for studies conducted since 2008. The studies were selected on the basis of the research questions and objectives. The list was narrowed down to six studies, of which five were randomised controlled trials and one was a cross-over research design. The studies used baseline data to determine the effectiveness of KT for lower limb musculoskeletal disorders. The results of two studies revealed that KT might be beneficial in rehabilitation for musculoskeletal disorders. The results indicate that KT proved to be a highly promising application for reducing pain when compared with sham and athletic tapes. In one study, while comparing KT with sensory motor training for proprioception, sensory motor training showed better results than KT, but KT was better at reducing pain on a short-term basis. The remaining two studies on ankle sprains reported that KT did not reduce swelling or improve functional performance. Kinesio tape may play a role in reducing short-term pain in lower extremity musculoskeletal disorders, however in future high quality studies that contribute to the evidence base for its use are needed with large datasets.

Biography

Mohammed Alkassim Is Working As Senior Pt At Sa Government Saudi Arabia And He Has Done His Masters From Northumbria University.

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Notes:

Assessment and treatment of pelvic girdle pain

Mais Ali Jawhari
Jordan University of Science and Technology, Jordan

Pregnancy-related lumbopelvic pain has puzzled medicine for a long time. More than 2,000 years ago, Hippocrates (c. 460–c. 377 B.C.) theorized that an irreversible relaxation and widening of the pelvis occurs with the first pregnancy, the resultant instability of the sacroiliac joints leading to symptomatic inflammation. Pelvic girdle pain (PGP) is defined by pain experienced between the posterior iliac crest and the gluteal fold, particularly in the vicinity of the sacroiliac joints (SIJ). Recent literature suggests that around half of all pregnant women incur lumbopelvic pain, which may persist, or arise, after delivery and will, in some patients, lead to severe disability. Unfortunately, much remains unclear. Consensus on terminology is lacking, and it is uncertain that all the terms used refer to the same pathological entity. Moreover, published prevalence figures vary widely; underlying pathological mechanisms are still a matter of debate, and there is no unanimity in the literature as to diagnosis and treatment.

Biography

Mais has completed her Bachelor degree in Physiotherapy from Jordan University of science and technology. She is a certified Mulligan Practitioner, completed post graduation Diploma in Cyriax modern orthopedic medicine and trained on different methods in manual therapy and dry needling. Currently she works as a physiotherapist in Mafraq Hospital in UAE.

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Notes:

Different type of Oral Rehydration Solution (ORS) developed from germinated cereals and pulses flour

Gulnaaz Shaikh
Chief Dietitian, Noor Hospital, India

Oral Rehydration Therapy (ORT) is the cheap, simple and effective way to treat dehydration but it lacks macro and micro nutrients.

Purpose of the study: Formulate and analyse the nutrients and microbial count in the modified flour oral rehydration solution (ORS).

Methodology: five types of (ORS) developed using different ingredient of germinated cereals and pulse flours (power flour)

ORS-I Germinated Rice + Wheat+ bajra + Cowpea

ORS-II Germinated Rice + Wheat + Jowar + Peas

ORS-III Germinated Rice + Wheat + Ragi + Green gram

ORS-IV Germinated Rice + Wheat + Sorgum + Moth beans

ORS-V Un-germinated rice

50-100 g quantity of (ORS) is added about 1 litre of water mash thoroughly and boil, stirring to prevent lumps. Salt can be added in the right amount a level teaspoon and when the solution is cooled it can be given immediately. All (ORS) sample nutrients, physio chemical properties, and shelf life were assessed for the period of 120 days.

Findings: Moisture of the developed ORS I was 4.25 percent with the carbohydrate value of 72.14g and protein value of 16.49g with fat value of 3.08g and energy value of 374Kcals.

Moisture of the developed ORS II was 4.51 percent with the carbohydrate value of 73.58g and protein value of 15.88g with fat value of 2.44g and the energy value of 369.64kal.

Moisture of the developed ORS III was 3.74 percent with the carbohydrate value of 71.04g and protein value of 15.54 with fat value of 2.49g and energy value of 368.73Kcals.

Moisture of the develop ORS IV was 4.56 percent with the carbohydrate value of 71.58g and proteins value of 16.74g with fat value of 2.38g and energy value of 374.70Kcals.

High positive correlation is seen between the flavour of porridges and water absorption capacity of the developed ORS, at 0.05% level.

A strong positive correlation was not among the texture of the developed ORS at 0.05% level.

The mean scores of the appearance of all developed ORS were 6.866. Among the five variations, appearance of ORS III scored highest 6.133 followed by ORS I with the mean value is 6.000 and ORS IV and SORS with mean values 5.933 and 5.333 respectively. The least mean score 1.807 obtained from ORS II.

Conclusion & Significance: Significant different between the developed (ORS) prepared using different combinations for the criteria of the appearance.

Significant different at 0.05% level between ORS I, ORS II, ORS III, ORS IV, with standard ORS for the criteria of the colour.

The mean score of the flavour of all developed ORS was 6.506. Among the five variation SORS scored highest 6.866 followed by ORS III (6.666) and the least mean score was 6.066 obtained from ORS I.

No Significant different between the developed (ORS) prepared using different combinations for the criteria of the flavour.

Recent publications:

1. Billoo et al(2006). "Role of a proboitic in management and prevention of diarrhea".
2. Boudraa et al (2001) "Effect of feeding yogurt versus milk in children with acute diarrhea and carbohydrate mal absorption".
3. Caulfield et al (2004) "Under nutrition as an underlying cause of child deaths associated with diarrhea , pneumonia, malaria and measles".

Biography

Gulnaaz Shaikh is a Chief Dietitian in a multi specialty hospital has professionalized in the field of clinical dietetics. Expose technical knowledge in community, clinical food and nutrition.

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Notes:

Malfuctioning of Ligaments

Shweta Sachin Ramteke
Karama Medical Center, UAE

Malfunctioning of ligaments can lead to various orthopedic painful conditions, which many a times go unrecognized and unattended. Want to highlight this disorder of human body its effect and remedy.

Malfunctioning could be:

a)Ligament laxity leading to hyper mobility and disorders

b)Stiffness of the ligaments leading to disorders.

Hyper mobility: Genetically it runs in family which can be recognized by Components of the Beighton scale. The effects are dorsal kyphosis, excessive lumbar lordosis, protrusion of Neck. The aim of physical therapy in hyper mobility syndrome is to approach the muscle inhibition, atrophy and the reduced joint control caused by the joint pain. Another important step in treating hyper mobility syndrome is education. Without this education patients will continue to go over the normal joint range and their extreme joint range can cause a more unstable joint. It is necessary to encourage an active lifestyle, so give for example a schedule with exercises. Stiffness of ligaments leads to disorder called Diffuse idiopathic skeletal hyperostosis (DISH)) an ossifying spinal disorder. DISH is thought to be a non- inflammatory, systemic disease characterized by continuous *ossification*. It characterized by unique, flowing calcification along the sides of the contiguous vertebrae of the spine The anterior longitudinal ligament of the spine is most commonly affected. The most common symptoms are mild to moderate pain and stiffness usually present 4th decade onwards. DISH can also affect your neck and lower back. Common symptoms are Stiffness, Pain, Loss of ROM, Difficulty swallowing or a hoarse voice. Risk factors are: Sex, Old age, Diabetic, prolonged use of certain medications, obesity. Therapy and treatment for DISH is based on the individual's presentation of symptoms due to the lack of well-designed studies supporting its management. If recognized early patient can be saved from misery by physical therapy in timely intervention to avoid the further complications leading to arthritis. PHYSICAL THERAPY helps in decreasing stiffness associated with idiopathic skeletal hyperostosis. ROM of the joints can be improved with the help of exercises. In the case study patients suffering from these malfunctioning of ligaments will be observed and the treatment given to them will be discussed.

Biography

Ms.Shweta Sachin Ramteke has completed her graduation in BPTh from a renowned medical college K.E.M HOSPITAL MUMBAI (INDIA). She has a keen interest in musculo skeletal and neuroscience. She has started her practice in India and continued her practice in different states, for 3 years. She is an active member of Indian Association of Physiotherapy. She has attended hands-on workshops and done some courses in the field of physical therapy which she is practicing in her clinic in Dubai. She got an opportunity to work in two different clinics in Dubai and successfully practicing as a physiotherapist at Karama Medical Center DUBAI(UAE).

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Notes:

Contents of physiotherapy interventions for management of low back pain in India – A survey

Ektaben Soni
Ashok and Rita Patel Institute of Physiotherapy- CHARUSAT, India

Low back pain (LBP) is a major health problem commonly seen by the clinicians. 60 to 90% of lifetime prevalence has been reported in general population. LBP is the major cause of disability in people younger than 45 year of the age. There is no information about physiotherapy practice toward the low back pain. Whether the Physiotherapist practicing in India is using the recommend guidelines for interventions for LBP is yet to explore. To explore the contents of Physiotherapy interventions for management of low back pain among physiotherapists in India. To compare the contents with the intervention supported by current available highly quality evidence. In this cross sectional study, 200 physiotherapist practicing in different sectors of Gujarat were screened for eligibility criteria. 187 physiotherapists were recruited as they fulfilled selection criteria. A Physiotherapy Intervention Recording form (PIRF) which content patient details, physiotherapist details and recommended interventions for low back pain was developed and pilot tested. Using PIRF, the physiotherapists were observed while treating different low back pain patients for single sessions. The demographic details of participants and physiotherapist were recorded and the duration of used interventions were also recorded in physiotherapy intervention recording form (PHRF). Descriptive analysis was done to analyses the data.The content of the physiotherapy treatment for low back pain were not uniform. Only 19.8 % physiotherapist used recommended guidelines for the treatment of low back pain. The current survey found that the contents of physiotherapist's treatment for low back pain where lack of consensus and not according to the recommended guidelines. A very few physiotherapists in India used recommended guideline for the low back pain management.

Biography

Ekta Soni currently working as an Assistant Professor in Charotar University of Science and Technology (Charusat) Changa- India. She has completed Master in Musculoskeletal Science (M.P.T- ortho) from Ashok & Rita Patel Institute of Physiotherapy, Charusat University-Changa. She is very enthusiastic not only towards patient care but also towards research as good research help in making good informed decisions which eventually help the patients. She has published articles in National & International journals. She is also associate editor board member of many journals.

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Notes:

The "smart insole": A pressure-sensing and vibrating insole to improve compliance in individuals with excessive foot pronation

Lili Silumesii
Physiotherapist, Zambia

Foot orthoses are able to affect biomechanics and reduce foot hyper-pronation by forcing an angular medial accommodation in order to shift weight or change angulations of the lower limbs. Non-adherence to exercise can interfere with quality healthcare outcomes in individuals with excessive foot pronation who wear insoles but do not exercise as required. The proposed clinical trial is intended to investigate the effectiveness of a "smart" insole. It will make use of foot insoles imbedded with an electronic device that senses foot pressure and vibrates when the foot goes into hyper-pronation. The insole will also be imbedded with a Bluetooth chip that will provide information onto a PC or smartphone. The individual's foot analysis will be done via the PC or smartphone's live streaming. An App will be created and paired to the insole. Information from the insole recording will be transferred to the PC or smart phone. The app will also provide timely reminders of daily exercise which may improve exercise compliance. The vibratory sensation is expected to stimulate the mechanoreceptors on the soles of the feet apart from serving as a reminder to actively control a hyper-pronated foot posture especially during static postures. The in-built pressure sensor will trigger the vibration each time the foot hyper-pronates, providing positive feed-back. The insole can be constructed and investigated on non-sports or sports persons with the combined help of other qualified professionals. The major aims and special features of the insole will be further discussed during the presentation.

Biography

Lili K Silumesii completed her Bachelor of Physiotherapy from Manav Rachna International University and her Master's degree in Orthopaedic Physiotherapy from Sharda University, India. She has received awards from both universities for obtaining first rank. She is now a lecturer at D.D.T College of Medicine in Botswana. She is also a member of Children in Action Zambia, an N.G.O focused on free treatment of children needing physiotherapy in Eastern Zambia.

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Notes:

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Dissecting the pain experience- a person centered approach to treating non-traumatic musculoskeletal pain

Khoren Iskenderian
New Body Synergies, Australia

According to the World health Organization (WHO), musculoskeletal conditions are the second largest contributor to disability worldwide, with low back pain being the single leading cause of disability globally. Musculoskeletal conditions are not just conditions of older age; they are relevant throughout the course of life. The majority of persistent non-traumatic musculoskeletal pain disorders do not have a patho-anatomical diagnosis that adequately explains the individual's pain experience and disability. The inability to make sense of a threatening pain experience can perpetuate pain and related fear posing a negative impact on the person's lifestyle, health and relationships. Pain consists of both physical and psychological properties that predominate and alter personality. Yet not all pain is as a result of a nociceptive stimulus received and transmitted by a sensory receptor of a peripheral nerve. This abstraction cannot convey what pain is and what it feels like as it always has a subjective component that is perceived by the patient, related to their previous experiences and their attitudes towards its resolution. Being able to make sense of the patient's musculoskeletal pain experience is an essential clinical skill to help foster self-efficacy for a better quality of life The purpose of this presentation is to offer the clinical audience a brief overview of the 3 dynamic variables that make up the human experience and how pain can affect them. A common-sense Model to defuse fear avoidance will be introduced in addition to the clinical relevance of contextual factors in placebo and nocebo effects in the treatment of musculoskeletal pain.

Recent publications:

1. Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016.
2. G. B. D. Disease and Injury Incidence and Prevalence Collaborators. 2017. Lancet, 390(10100), 1211-59
3. Giacomo Rossettini, Elisa Carlino & Marco Testa, Relevance of Contextual factors as Triggers of placebo and nocebo effects in Musculoskeletal pain, BMC Musculoskeletal Disorders. 2018; 19:27
4. Bialosky J.E., Bishop M.D. & Cleland J.A., Individual Expectation: An Overlooked, but Pertinent Factor in the Treatment of Individuals Experiencing Musculoskeletal Pain. Phys There. 2010:90:1345-1355
5. Lewis J, O'Sullivan P.
6. Br J Sports Med. 2018 Dec;52(24):1543-1544. doi: 10.1136/bjsports-2018-099198. Epub 2018 Jun 25
7. J Orthop Sports Phys Ther 2017;47(9):628-636. Epub 13 Jul 2017. doi:10.2519/jospt.2017.7434.

Biography

Khoren has been a physiotherapist in private practice since 2005. He has a Bachelor's degree in Human Anatomy and Physical Therapy from McGill University. His passion and special interest in clinical practice is deciphering chronic non-traumatic musculoskeletal pain using Cognitive behavioral methods, functional neuroscience, pain neuroscience education, somatosensory approaches and manipulative therapies. His Practice, New Body Synergies is a multi-disciplinary Allied Health Centre located in Sydney, Australia. He continues his clinical development by exploring the field of Behavioral Medicine with the National Institute of Cognitive and Behavioral Medicine (NICABM). Khoren, an aspiring thought leader is the founder of KnowBody, a 6 module professional development course delivered to allied health practitioners that are willing to compliment the current paradigm of their practice with evidence based neuroscience, somatosensory trauma therapy, biomechanics and musculoskeletal medicine.

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Scientific Meetings

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April 22-24, 2019 | Dubai, UAE

Workshop

Day 2

Impact of dietary protein intake, physical activity on urinary creatine and urinary creatinine excretion in a team-sports

Nabeela Mansuri
Sports Nutrition, Breach Candy Hospital, India

Statement of the Problem: Creatine and Creatinine plays a role in muscle function. Urinary creatine and urinary creatinine concentration was measured in order to see significance in monitoring athlete and athlete's performance. Purpose of the study: Evaluate association of dietary protein intake and physical activity on urinary creatine, urinary creatinine concentration in different team sports [cricket players (C), basketball players (B) and football players (F)]. Methodology: A total of 62 players from different team sports - C (n-20), B (n-17) and F (n-25) age of 18-30 years were participated. Post training urine samples was analyze by difference in the creatinine present before and after heating with acid solution urinary creatine was obtained. Using Jaffe's reaction and absorbance read spectrophotometrically at 520nm urinary creatinine was obtained.24 hour dietary recall was consider.

Findings: Positive correlation between urinary creatine and dietary protein per day, dietary protein according to body weight per day was found ($r = 0.013$, $p<0.001$), ($r=0.000$, $p<0.005$) respectively. Negative correlation between urinary creatinine and dietary protein according to body weight per day and duration of practice per day was found ($r = 0.000$, $p<0.001$), ($r = 0.035$, $p<0.005$) respectively. Urinary creatine mean (SD) values- C group 78.63 ± 27.17, B group 102.65 ± 38 and F group 169.60±41.58. Urinary creatinine mean (SD) values- C group 46.60 ± 37.23,B group 84.88 ± 48.27 and F group 70.40±44.083.

Conclusion & Significance: Significant increase was seen in urinary creatine excretion with respect to dietary protein per day, dietary protein according to body weight per day. Urinary creatine excretion is more in football players followed by basketball players. Significant decline was seen in urinary creatinine excretion with respect to increase dietary protein according to body weight per day and increase duration of practice. Urinary Creatine excretion is more in basketball players followed by football players. Urinary creatine and urinary creatinine excretion depends on sports-type, duration of sports and protein consumption.

Recent publications:

1. Matilda Steiner-Asiedu et al (2017) Urine creatinine and anthropometric indices of sportsmen and women. Biomed Biotechnol Res J 2017;1:134-40
2. I. Bezrati-Benayed et al (2014) URINARY CREATINE AT REST AND AFTER REPEATED SPRINTS IN ATHLETES: A PILOT STUDY. Biol Sport 31(1): 49–54.
3. Giuseppe Banfi (2010) SERUM CREATININE CONCENTRATIONS IN ATHLETES: ARE THEY NORMAL? Brazilian Journal of Biomotricity v. 4, n. 3, p 157-164.

Biography

Nabeela Mansuri has expertise in the field of diet, nutrition and exercise. Knowledge in diet, nutrition and exercise help in improving the health and wellbeing. Immensely contribute her work for sports, cancer and diabetes this are few area where right guidance for food, exercise is needed depending on individual physical, mental, social, cultural, economical status.

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Radiofrequency in musculoskeletal pain

Soheil Mansour Sohani
Iran University of Medical Sciences, Iran

Radiofrequency energy is acclaimed by thousands of patients and high level sports people for its therapeutic benefits. Its energy is a high frequency current, ranging between 300 KHz and 1 MHz it accelerates "natural regeneration" in the biological tissue. The low level of energy means it is totally non-invasive and 100% natural for the human body.Studies over more than thirty years have shown that the therapeutic effects stimulate natural tissue reconstruction and pain relief.In the 300 KHz – 1 MHz frequency range, the C Gabriel Research team highlights the Permeability of cellular membranes by analyzing several types of biological tissue for their Study "The dielectric properties of Biological tissues". The founder of this current is Arsène d'Arsonval, a famous doctor, but also a French Physicist and inventor. In 1890, d'Arsonval discovered the benefits of the permeability of plasma membrane by increasing frequency to more than 100 KHz. In the 1920s, with other researchers and doctors, he developed the first capacitive and Resistive electrodes. A work by William Beaumont in 1939 dealt extensively with these modes of applications. 1995: The term TECAR (Transfer Electrical, Capacitive and Resistive) is first used in Italy. New scientific studies are published in Italy. Frequencies of 500 KHz and 650 KHz. The diathermy effect is prioritized generation of more intuitive, more dynamic and more efficient equipment.

Effects

- Accelerated healing
- Immediate and lasting pain relief
- Accelerated vascularization

Indications: For analgesic and anti-inflammatory purposes, improvement of joint mobility, fibrolytic action, reduction of edema. Decrease in recovery time, acceleration of return to activity. Sprains, fractures and muscle tears. Acute post-traumatic. (SPORT Physiotherapy) Arthritic syndromes, Acute & chronic tendinopathies, epicondylitis, neck pain, acute and Chronic lower back pain, capsulitis and joint stiffness.

Contraindications: Pacemakers and artificial organs, pregnancy, bleeding disorder, insensitivity to temperature changes, burn, infection, cancer, growth cartilage, hypotension, phlebitis.

Biography

Soheil Mansour Sohani completed his BSc. In physiotherapy from TUMS, MSc. and Ph.D. from IUMS in Tehran, Iran.Dr. Mansour Sohani has received many scholarships from IASP to poster presentation in international congresses (Vienna, Austria, 1999; San Diego, USA, 2002; Sydney, Australia, 2005; Glascow, Scotland, 2008; Montreal, Canada, 2010; Milan, Italy, 2012; Buenos Aires, Argentina, 2014). He is an assistant professor and lecturer at Physiotherapy Dept., School of Rehabilitation Sciences, Iran University of Medical Sciences, Tehran, Iran. He have several years' clinical experiences (from 2004 to now) in sport rehabilitation. His research fields are cross cultural adaptation of questionnaires, postural control and new modalities in physiotherapy (PEMF, HPLT, ESWT and TECAR).He have had many workshops (during past three years) around his country to transfer his information and experience to his colleagues.

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Notes:

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Scientific Meetings

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Scientific Tracks & Abstracts

Day 2

Dual task performance and executive function in physically under active and physically active elderly: A comparison

Priyanka Parate
Revive Health Physiotherapy and Ergonomics Clinic, India

Many activities of daily life involve simultaneous performance of multiple tasks which concurrently challenge motor and cognitive function . Aging leads to abnormal alterations that compromise the performance of motor skills,including impaired postural control, abnormal posture/ gait/ balance. This leads to a reduction in functional capacity thus causing difficulties in adapting to the environment, all of which can lead to a greater risk of falls. We hypothesized that, those who exercise regularly or have a active physical lifestyle will have good physical fitness and cognitive abilities which will help them to have a good dual task abilities. This was a cross-sectional study with underlying idea to assess and compare functional balance- dual task performance and executive function in physically under active and physically active elderly. Results demonstrated that there is significant difference in the mean of TUG, TUG- COG and TUG- MAN and also TMT –A and TMT-B in physically under active and physically active elderly. The mean score of TUG-COG, TUG- MAN, TMT-A, TMT-B was much more in under active elderly. This must have lead to enhanced Dual task performance i.e TUG-COG and TUG- manual scores. Findings of this study can be used to endorse positive effects of exercises and active lifestyle in elderly. We suggest a physically active lifestyle from the age of 30-35 years (the duration from when decline in physical and cognitive function starts) in order to have a good dual task ability which will help to reduce falls and enhance Quality of life in elderly.

Biography

Priyanka Parate has her expertise in Neurological- Adults and Paediatrics conditions and very passionate to treat such conditions. She developed special interest in Elderly, frequency of falls, its causes and their quality of life and so started with the research. She is also Certified Mulligan Practioner. Presently working as Senior Neuro Physiotherapist At Revive Health Physio And Ergonomics Clinic.

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Notes:

Effects of retrowalking on osteoarthritis of knee in geriatric population

Deepti N. Wadhwa
MVP'S College Of Physiotherapy, Nashik, India

Background: In rural population, cross sitting positions in farming activities are very common which leads to wear and tear of knee joint. Biomechanical studies indicated persons with OA knee walk with increased adduction moment that alters the joint biomechanics; which causes symptoms in knee osteoarthritis patients. Retrowalking has recently emerged as a new concept in Physiotherapy and Rehabilitation.

Subjects and Methods: The Comparative study consists of 40 participants with the age more than 60 years were randomly selected as per inclusion and exclusion criteria. In group A Retrowalking and Conventional Physiotherapy treatment was given. In group B only Conventional Physiotherapy treatment in the form of pulsed SWD, strengthening exercise such as static and dynamic quadriceps exercise, straight leg raise, prone knee bending, side lying hip abduction, prone hip extension exercise was given. Participants received 9 sessions, 3 days/week for a period of 3 weeks.

Outcome measure: NPRS(Numerical Pain Rating Scale), WOMAC(Western Ontario and McMaster Universities Arthitis Index)and TUG(Timed Up and Go test) measured before and after intervention.

Results: The participants in group A showed highly significant improvement in NRS, WOMAC and TUG. This was associated in group B showed significant improvement in NRS, WOMAC, TUG.

Conclusion: Retrowalking is effective and can be used as adjunct to conventional treatment in decreasing pain and disability in patients with knee osteoarthritis.

Biography

Graduation: MVP'S College Of Physiotherapy,Nashik
Post Graduation: Dr.A.P.J Abul Kalam College Of Physiotherapy, Loni
Present Position: Working as Assistant Professor at MVP'S College , A Sub co- ordinator of Nashik District of Indian Association Of Physiotherapy Womens Cell , recently elected as Executive member of Maharashtra State Indian Association Of Physiotherapy.

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Notes:

Effect of positional release therapy and taping on unilateral upper trapezius tender points

Poonam Mogal
Consultant Physiotherapist at HAL Hospital, India

Neck pain commonly seen in back of neck and between the base of neck to shoulder mainly indicate the involvement of upper trapezius muscle. Common causes of upper trapezius tender point are prolong uncomfortable position of upper limb and neck, carrying heavy loads and physically demanding work. The present was conducted to find out effect of PRT and Taping in Trapezitis subjects. Method: An experimental study was conducted on 30 subjects with age group between 20-50 years were taken. A total of 30 subjects were selected with unilateral trapezius tender points and were equally divided in to two groups. Both the groups received active shoulder girdle protraction, retraction, elevation, and depression movement. While group 1 received Positional Release Therapy (PRT)and group 2 received Taping. Results: Treatment was given for twice a week for 2 weeks. Pain measured by numeric pain rating scale and Active Range of Ipsilateral neck Flexion measured by goniometer. Intervention values of both groups were compared by paired t-test (within group) and unpaired t-test(between group) to find out the within group effect for both the studied variables. Both groups were showing statistically significant improvement with p value less than or equal to 0.001. p value for pain and ROM is 0.606 and 0.260, which shows that there is no statistically significant difference between both the groups after intervention. The study concluded that PRT and TAPING are equally effective in Tender Point of Unilateral Upper Trapezius Muscle.

Biography

Gradution: MVP'S College of Physiotherapy,Nashik.
Present position: HAL hospital as a consultant physiotherapist and also I collaborate with orthopedic speciality clinic.

Notes:

Effects of Cupping Therapy

Amir Hariti
Sports Physiotherapist, France

Cupping therapy has been used widely as a safe and common method to tackle soft tissue lesions in most countries and has been used for health promotion, preventive, and therapeutic purposes. Eber's papyrus (1550 BC) from Ancient Egypt is one of the oldest medical texts to mention cupping therapy. It's performed by applying cups to selected skin points and creating a sub-atmospheric pressure, either by heat or by suction. The results showed that incorporation of cupping therapy in a routine physical therapy programme can reduce the severity of symptoms and can significantly decrease the VAS scores. There is a promising evidence in favour of the use of wet cupping for musculoskeletal pain, specifically nonspecific low back pain, neck pain, Carpal tunnel syndrome, and brachialgia.

Recent publications:

1. MOURA (2018) BRAZIL Cupping therapy and chronic back pain: systematic review and meta-analysis 10.1590/1518-8345.2888.3094
2. MOHAMMADI (2019) IRAN
3. The effects of cupping therapy as a new approach in the physiotherapeutic management of carpal tunnel syndrome 10.1002/pri.1770
4. KIM (2018) KOREA Is cupping therapy effective in patients with neck pain? A systematic review and meta-analysis 10.1136/bmjopen-2017-021070
5. BRIDGETT (2018) AUSTRALIA Effects of Cupping Therapy in Amateur and Professional Athletes: Systematic Review of Randomized Controlled Trials 10.1089/acm.2017.0191
6. MOHSEN (2018) IRAN
7. Wet-Cupping Is Effective on Persistent Nonspecific Low Back Pain: A Randomized Clinical Trial 10.1007/s11655-018-2996-0
8. WANG (2017) CHINA
9. The effect of cupping therapy for low back pain: A meta-analysis based on existing randomized controlled trials 10.3233/BMR-169736

Biography

Master's degree in Physical Therapy in 2014 - stretching and sportive performance. After the cupping therapy (2015) and manual therapy (2016) formations, an expert sport physiotherapy's formation (2019) was done with one of the best French formation center.

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Notes:

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Scientific Meetings

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Posters

Changes in the antagonist muscle co-activation after damaging the agonist muscle with isokinetic exercise

Adam Fesus, Matyas Varga, Bence Balazs, Balazs Sebesi, and Mark Vaczi
University of Pecs, Hungary

Statement of the Problem: It is well known that a single bout of damaging exercise induces acute strength deficit and sometimes a myoelectric compensation in a muscle. Here we hypothesized that after a damaging exercise, the strength as well as muscle electric activity changes in the agonist and antagonist muscles are joint angle specific.

Methodology & Theoretical Orientation: We tested thirteen participants with maximal voluntary knee extensions on a dynamometer. Participants performed isometric contractions at 70, 50, and 30 degrees of knee joint angle. After this, a dynamometric exercise bout was executed with 4x15 full effort eccentric-concentric contractions to provoke muscle damage and pain. The test contractions were repeated 24h after the acute exercise. Quadriceps and hamstring EMG activity was measured during the strength tests.

Findings: Participants reported significant soreness 24h after the exercise. A tendency for the strength deficit was seen to increase with decreasing knee joint angle. There was no change in quadriceps femoris activity in any angle conditions. However, hamstring co-activation increased significantly at every angle, without any difference among angle conditions.

Conclusion & Significance: We conclude that with the same neural drive to the quadriceps, the damaged fibers were irresponsive, inducing strength deficit. The non-uniform changes in quadriceps and hamstring EMG activity after the damaging exercise suggest that knee joint stability is altered.

Recent publications:

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Biography

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The role of gluteus medius muscle in stabilizing the knee joint during jumping and landing on unstable surface

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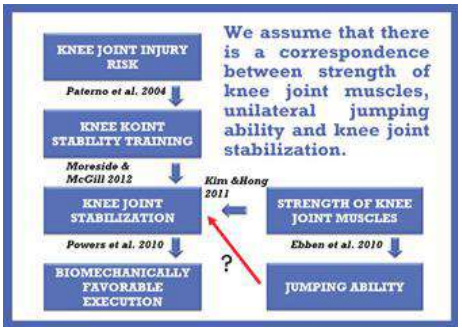
Introduction: In sports where unilateral jumps and landings occur, injuries in the knee joint are frequent. Knowing the relationship between unilateral jumping ability and knee joint stabilization, we could easily predict the risk of knee injuries with simple tests.

Methods: Twenty-five healthy men participated in our examinations. The following three measurements were made: 1.: maximum isometric force/torque in knee extension, -flexion, and in hip joint abduction. 2.: propulsion impulse with force plate during the maximal unilateral jumps. 3.: landing from a height of 30 cm to an unstable surface. In all three tests, activity of vastus lateralis (VL), vastus medialis (VM), biceps femoris (BF) and gluteus medius (GM) were measured using EMG surface electrodes.

Results: The order of normalized EMG activities during unilateral jumps was: GM (172%), VL (122%), VM (108%), BF (52%). The EMG activities have shown similar values during landing:(114%, 94%, 92%, 50%). The relative abduction torque correlated with the propulsion impulse. The relative hip joint abduction torque correlated negatively with the relative BF activity during landing.

Conclusion: From the high activity values of GM during jumps and landings we can conclude that the valgus control of the knee joint is important. The vertical jump performance is influenced by the relative strength of GM. Subjects with weaker jumping ability and/or weaker hip joint abduction force activate the BF more during landing on unstable surface.



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Biography

Balazs Sebesi is an Recreation MSc student at the University of Pecs. He is also an assistant research fellow at the University of Pecs, Institute of Sport Sciences and Physical Education. His work focuses specifically on the biomechanics of the knee joint stability during exercise.

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Frontal plane neurokinematical mechanisms of knee joint and pelvis stabilization during unilateral vertical jump

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University of Pecs, Hungary

Statement of the Problem: In our experiment, we assumed that the m. gluteus medius (GM) muscle as a stabilizer of the knee joint is related to the extent of knee valgus during unilateral jump. We also assumed that the m. erector spinae (ES) and m. quadratus lumborum (QL) muscles are related to the scale of the pelvis frontal plane tilt during unilateral vertical jump.

Methodology & Theoretical Orientation: Twenty-three healthy males performed maximal hip abduction and trunk lateral flexion for recording GM, ES and QL EMG activity. During unilateral jumps, we calculated the propulsive mechanical impulse using the force-time curves recorded with force plate. Through the unilateral jump, with a motion tracking system, we measured the degree of the orientation angles of the thigh and the pelvis in the frontal plane. EMG was recorded during the jumps and all values were normalized to those obtained during either hip abduction or trunk lateral flexion.

Findings: Through the jumps we received the following normalized EMG outcomes: ES: 311%, QL: 292%, GM: 142%. There was no correlation among propulsive impulse and any EMG values. However, we found negative correlation between GM activity during unilateral jump and the extent of the knee valgus. QL and ES activities were not correlated with the magnitude of hip tilt.

Conclusion & Significance: Our results show that during unilateral jump the activation of all of the muscles are prominent. Jumping ability is independent from the activity of the stabilizer muscles, but the activity of GM highly influences knee valgus, therefore strengthening the GM could play a role in the reduction of knee injuries.

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Biography

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