

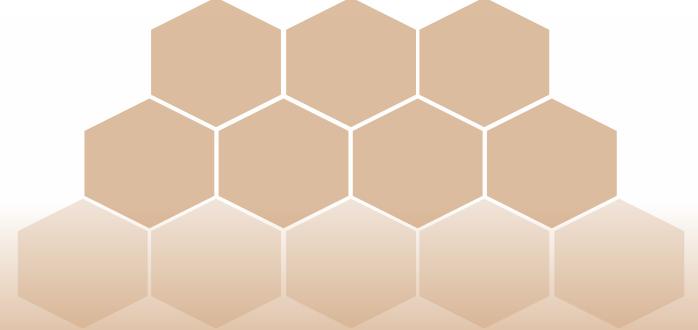


5th International Conference on

Physiotherapy

November 27-29, 2017 Dubai, UAE

Keynote Forum (Day 1)



5th International Conference on

PHYSIOTHERAPY

November 27-29, 2017 Dubai, UAE



Anand Shetty
University of St. Mary, USA

Disparity in utilization of healthcare services among African Americans and Caucasians with diabetes in the United States

The purpose of this study was to identify disparity of utilization of healthcare services among African, Americans and Caucasians in the United States from 2006-2008 and 2009 and 2011. A random sample of patients with type-II Diabetes Mellitus was collected from 2006- 2011 using files derived from inpatient charts and insurance carrier data was analyzed by an independent t-test. The outcome variables are number of hospital stays, length of hospital stay, number of physician office visits, number of physical therapy visits and incidence of lower limb amputations. Health care disparities in the utilization of health care for DMII exist between African Americans and Caucasians. Caucasians are more likely to visit physicians and physical therapists while African-Americans are more likely to go to hospitals, stay longer in hospitals, and have lower limb amputations. The causes of these disparities between African Americans and Caucasians require further investigation for complete understanding.

Biography

Anand Shetty is a Professor in the Department of Physical Therapy at the University of St. Mary. He is also the Co-Director of Research in the department. Currently he teaches anatomy, exercise physiology, and a series of research courses. He received his Doctoral degree in Physical Education from the University of Northern Colorado. He has published and presented numerous articles on obesity and a frequent invited speaker on obesity and nutrition. He has more than 25 years of teaching and research experience.

anand.shetty@yahoo.com

5th International Conference on

PHYSIOTHERAPY

November 27-29, 2017 Dubai, UAE



Areerat Suputtitada

Chulalongkorn University, Thailand

Novel of extracorporeal shockwave therapy and high-power laser therapy in musculoskeletal pain conditions

R ehabilitation management of musculoskeletal pain conditions are challenges. Most patients developed chronic pain conditions since inadequate management during acute pain phase. Currently, extracorporeal shock wave therapy (ESWT) and Class IV lasers or high-power laser therapy are novel therapy for these conditions. Interestingly both therapies with different actions and mechanisms have same benefits on musculoskeletal pain conditions and considered as regenerative medicine therapies. The evidences of safety, efficacy and good patient compliance made both therapies to be increasing popular in the worldwide. ESWT has become one of the best investigated treatment modalities for various conditions of the musculoskeletal system such as myofascial pain syndrome, tendinopathies and osteoarthritis, etc. An optimum treatment protocol for ESWT appears to be three treatment sessions at one-week intervals, with 2000 impulses per session and the highest energy flux density that can be applied. The proposed mechanisms for the benefit of ESWT on musculoskeletal tissue include direct effects on tissue calcification, alteration of cell activity through cavitation, acoustic micro streaming, hyper vascularity and blood flow increment, alteration of cell membrane permeability and effects on nociceptors through hyper stimulation, blocking the gate control mechanism. Class IV lasers or high-power laser therapy offers better therapeutic outcome compared to Class III lasers as follows: (1) Larger dosages of therapeutic energy, (2) Deeper penetration into the body, (3) Larger treatment surface area, this is important when treating large regions, such as the lumbar spine, quadriceps or hips, (4) Greater power density, (5) Continuous power supply and (6) Superior fiber optic cables: Fiber optic cables transmit laser energy from the laser to the treatment probe (wand) at the end of the cable. The beneficial effects of ESWT and high-power laser therapy on musculoskeletal tissues are anti-Inflammation, analgesic, accelerated tissue repair and cell growth, improve vascular activity, release trigger points and desensitization and reduce fibrous tissue formation. In conclusion, ESWT has been proven for more than 20 years as effective and safe noninvasive treatment option for tendon and other pathologies of the musculoskeletal system in a multitude of high-quality RCTs. High power laser therapy is by far the most exciting new clinical treatment to advance physical medicine in the 21st century anti-inflammatory and analgesic effects. It offers better therapeutic outcome compared to Class III lasers which has been using for a long period of time with little impressive outcome. High power laser therapy is newer therapy and increasing evidences.

Biography

Areerat Suputtitada is a Professor of Physical and Rehabilitation Medicine. She is the Chairperson of Neurorehabilitation Research Unit at Chulalongkorn University and Chairperson of Excellent Center for Gait and Motion at King Chulalongkorn Memorial Hospital in Thailand. She was invited as international speaker for more than 60 times around the world. She has received 18 international and national awards and published more than 60 international and national articles in the areas of her expertise including neurological rehabilitation, spasticity and dystonia, gait and motion and pain. She is an expert clinician in ESWT for various indications in the field of physical and rehabilitation medicine. She has been elected and appointed to important positions at ISPRM such as the Chair of Women and Health Task Force and the International Exchange Committee.

prof.areerat@gmail.com Areerat.Su@chula.ac.th

5th International Conference on

PHYSIOTHERAPY

November 27-29, 2017 Dubai, UAE



Dagmar Pavlu
Charles University, Czech Republic

Elastic resistance exercises in physiotherapy

Recovery process after different illness or injuries to a normal life is very long and difficult process, in which participate and cooperate many professionals-physicians, physical therapists, occupational therapists, trainers, conditioning specialist etc. In different stages of recovery process many procedures are used, special treatment interventions, most popular recovery techniques like hydrotherapy and massage, stretching, also nutrition-intervention, etc. Important role in recovery procedure play strength training and conditioning. To achieve optimal recovery result, therapy and/or training must be carefully planned and functional establish. As a very beneficial procedure, functional elastic resistance training with Sanctband, which can be optimally dose in and adopt to all stages of recovery procedure. Sanctband resistance training can be used not only like typical strengthening training, but can support recovery process by different ways. Areas, which can be used for elastic resistance training with Sanctband, as one of most modern devices, will be presented and documented by examples of research. Focus will be done on demonstration of various workouts and strength training in therapy, endurance training and therapy procedures to increase muscle stretch and expand the scope of joint mobility, coordination or training exercises, speed ability or training exercises, exercises to improve stability, general exercises or specific training for sports, exercises for the handicapped, exercises for children, exercises in pairs or groups and also on water exercises.

Recent Publications

1. Pánek D, Pavlu D and Čemusová J (2012) Water Surface Electromyography. In: Schwarz, M. (Ed.) EMG Methods for Evaluating Muscle and Nerve Function: 455-470.

Biography

Dagmar Pavlu is an Associate Professor on Charles University, Czech Republic and is the Head of Department of Physiotherapy of FTVS. She has received her Master's degree in Physiotherapy and Doctor's degree in Pedagogy and received her PhD (CSc). Further, she earned the degree of an Associate Professor in Exercise Physiology. She was the President of the professional organization of Physiotherapists of the Czech Republic. She is a Member of Accreditation Board by Ministry of Health and also a Member of EC of Association of Rehabilitation and Physical Medicine in Czech Republic. She was the Vice-Chairman of European Region of World Confederation for Physical Therapy. Her current research interests include analysis of the effect of physiotherapeutical methods and she has altogether 150 publications to her credit.

dagmarpavlu@iol.cz

Notes:



5th International Conference on

Physiotherapy

November 27-29, 2017 Dubai, UAE

Keynote Forum

(Day 2)



5th International Conference on

PHYSIOTHERAPY

November 27-29, 2017 Dubai, UAE



R Harihara Prakash

Sardar Patel University, India

Health and built environment: Promoting accessibility to the persons with disability

India is a country with different caste and religions. People have different views and opinion about their beliefs according to their religion. In addition, more than 70% of population lives in rural part of India where education level is very poor. Disability is considered as burden, useless and having nothing to contribute to the welfare of society. However, both government and non-government organizations have taken steps towards awareness of disability in India and condition of disabled people is getting improved slowly. The attitude of society towards persons with disabilities plays a major role in improving the condition of this special population. Since more than two percent of total population of India is disabled, it is important to know the attitude. Persons with disabilities face problems in day to day life, in education, job and rehabilitation services due to negative attitude of society which is to be corrected. The impact of awareness campaign done by GOs and NGOs changes the people's mind set towards persons with disability and brings in inclusion in the society which is the primary need. The built environment includes all of the physical parts of where we live and work (e.g., homes, buildings, streets, open spaces and infrastructure). Even for normal persons without any disability the built environment influences his or her level of physical activity. For example, inaccessible or nonexistent sidewalks and bicycle or walking paths contribute to sedentary habits. These habits lead to poor health outcomes such as obesity, cardiovascular disease, diabetes and some types of cancer. It is also known that public places and transportation are not accessible for persons with disabilities. Government spend huge amount of money for infrastructure but if a person with disability cannot use them, it is a big issue. It is the society which makes a person, who is handicapped, a disabled by not providing such infrastructure according to their needs. So, here arise the collaborations across multiple disciplines such as health care professionals, transportation, urban planning, architecture, and public health law to create a barrier free environment to promote accessibility to all.

Biography

R Harihara Prakash is the Principal and Professor at K M Patel Institute of Physiotherapy, Karamsad. He has 18 years of professional experience in clinical as well as academics. He is a Doctorate in Physical Therapy from National University of Medical Sciences, Spain. He was awarded with Rashtriya Vidhya Saraswathi Puraskar Award for his excellent contribution in academics. He was former Dean, Faculty of Physiotherapy, Baba Farid University of Health Sciences, Punjab. He is in the Editorial Board and peer reviewer for some international journals. He is also in the panel of NAAC. He has obtained various skills by certification in the field of neurology, osteopathy, manual therapy from various countries. He has published and presented research papers in various national and international conferences. He is an eminent speaker and an academician.

sail	nari 7	'6a	amai	I.com

Notes:

5th International Conference on

PHYSIOTHERAPY

November 27-29, 2017 Dubai, UAE



Faris Alshammari

Hashemite University, Jordan

Effective way to stretch the hamstring muscle: Randomized clinical trial

Background: Hamstring muscle is a major muscle that contributes to human body posture. Shortening and tightness of hamstring muscle affect postural alignment and lower quarter mechanics resulting in possible mechanical pain.

Purpose: The aim of this study was to find a new effective way in stretching hamstring muscle to improve muscle's flexibility and body mechanics.

Subjects: 60 subjects will be recruited from students at the Hashemite University who are between 18-25 years old. They will be included in this study if they have limited flexibility of right hamstring muscle, defined as a limitation in knee extension 20 degree or more with 90 degree of hip flexion. Also, they must be healthy. Subjects will be excluded from the study if they have a history of lower back, hip joint, or knee joint pathology. Subjects will be assigned randomly into 3 independent treatment groups.

Design: A single blinded randomized clinical trial design.

Methods: Range of motion of knee extension was measured with hip at 90-degree flexion in supine position using a Goniometer. Then, subjects received passive hamstring stretch (PHS), passive hamstring stretch followed by neuro-dynamic of sciatic nerve (ND) or passive hamstring stretch followed by 3 sets of 10 repetitions of active knee extension to the end of the range (QA).

Results: The preliminary results were calculated based on 10 subjects in each intervention group (total N=30). There were no significant differences in baseline muscles flexibility, subject's age and BMI among groups. There was no significant difference in the improvement of hamstring muscles flexibility among groups. Hamstring flexibility increased significantly in the ND group post intervention compared to pre-intervention (26.65 ± 7.95 vs. 34.95 ± 8.42 ; P=0.002). Also, hamstring flexibility increased significantly in the QA group post intervention compared to pre-intervention (24.40 ± 7.35 vs. 35.05 ± 9.59 ; P=0.000). However, the improvement of hamstring flexibility in the PHS group was not significant (29.75 ± 8.01 vs. 34.90 ± 7.35 ; P=0.062)

Conclusion: Neurodynamic of sciatic nerve and quadriceps muscle activation add more effect to hamstring flexibility following a passive hamstring stretch.

Discussion: The improvement in the PHS group was not significant possibly due to small sample size. Even though the improvement was significant in ND and QA groups, the increase of hamstring flexibility was more in QA group compared to ND group.

Novelty of the Current Study: According to our best knowledge, in the previous studies there was no usage of Neurodynamic or Quadriceps Activation techniques in conjunction to PHS in order to improve Hamstring muscle flexibility.

Biography

Faris Alshammari has a BSc in Physical Therapy from the Hashemite University, Jordan. He pursued his higher education in USA at Loma Linda University where he achieved a Master's degree in Physical Therapy in 2010 and PhD in Rehabilitation Science in 2015. He is an Assistant Professor at the Hashemite University, Physical and Occupational Therapy Department, Jordan. He has published more than 24 papers in reputed journals. He has also invented new intervention (Tactile Feedback System) to improve body balance in the elderly.

faris3310@yahoo.com

5th International Conference on

PHYSIOTHERAPY

November 27-29, 2017 Dubai, UAE



Michael Jung
Fresenius University of Applied Sciences, Germany

Infantile postural asymmetry and physical therapy: A randomized controlled trial

Background: Physical therapy is an acknowledged and frequently applied method for infantile postural asymmetry. However, there is not yet sufficient evidence for its effectiveness in pediatric treatment.

Objective: In a randomized controlled trial, the effect of Vojta therapy versus neurodevelopmental treatment (NDT) is assessed in infants with postural asymmetry.

Methods: 65 infants with postural asymmetry were recruited. 37 infants aged six to eight weeks (mean 7.38) were found to be eligible and randomly assigned to two groups, with 19 receiving Vojta therapy and 18 NDT. Using a standardized and blind video-based assessment, restriction in head rotation and convexity of the spine in prone and supine position before and after therapy were documented. A reduction of at least four points (range of scale 20 points) in postural asymmetry was regarded as a clinically relevant change.

Results: A four point reduction was achieved in both groups within eight weeks. A mean difference (pre-post) between the groups of -2.96 points (95% CI [-5.01; -.91]) in favor of Vojta therapy was observed (p=0.025). Improving attitude was more evident in the supine position than in the prone position.

Conclusion: While both NDT and Vojta therapy are effective in the treatment of infantile postural asymmetry and well applied by the parents, therapeutic effectiveness is greater within the Vojta group. Parental compliance was the same in both groups regardless the babies crying in the Vojta group.

Biography

Michael Jung has completed his PhD at the Medical Faculties of the Martin Luther University Halle-Wittenberg, Germany. He is the Dean of the Master program in Interdisciplinary pediatric therapy at the Carl Remigius Medical School in Frankfurt, Germany. He has published more than 35 papers in reputed journals and has been serving as an adhoc-reviewer in international journals.

jung.michael@hs-fresenius.de

Notes: