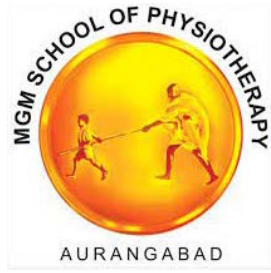


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International Multidisciplinary Rehab E-Con 2022

26th & 27th February 2022

Organized by

Association for Clinical Neurology and
Mental Health (ACNM)

In Association with

MGM School of Physiotherapy
Aurangabad

Partners



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International Multidisciplinary Rehab-E-Con-2022

" A Journey Towards Inclusive Society"

**MGM School of Physiotherapy,
Aurangabad, Maharashtra, India
26th & 27th February 2022**

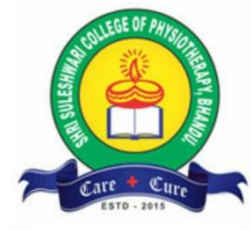
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Preface

This book reports the Proceedings of the **“International Multidisciplinary Rehab E-Con 2022”** held on **26th & 27th February 2022**, organized by **Association for Clinical Neurology and Mental Health & MGM School of Physiotherapy**.

The publishing department has accepted more than 300 abstracts. After an initial review of the submitted abstracts, 185 papers were presented at the conference and were accepted for publication in the Conference Proceedings. The topics that are covered in the conference include Cardiopulmonary Disease, Musculoskeletal & Sports Condition, Cerebrospinal Disorder, Community Wellness etc. We would like to thank all the participants for their contributions to the conference and the proceedings.

Reviewing papers of the **Rehab E-Con 2022** was a challenging process that relies on the good will of those people involved in the field. We invited more than 20 researchers from related fields to review papers for the presentation and the publication in the **Rehab E-Con 2022** Proceeding. We would like to thank all the reviewers for their time and effort in reviewing the documents.

Finally, we would like to thank all the proceeding team members who with much dedication have given their constant support and priceless time to bring out the proceedings in a grand and successful manner. I am sure this **Rehab E-Con 2022** will be a credit to a large group of people, and each one of us should be proud of its successful outcome.

Rehab E-Con 2022

From BioLEAGUES Director's Desk...

On behalf of **BioLEAGUES Worldwide**, I am delighted to welcome all the delegates and participants around the globe to the “**International Multidisciplinary Rehab E-Con 2022**” which is going to be held on **26th & 27th February 2022**.



This conference will revolve around the theme “**A Journey Towards Inclusive Society**”.

It will be a great pleasure to join with Doctor, Research Scholars, and physicians all around the globe. You are invited to be stimulated and enriched by the latest innovations in all the aspects of Physiotherapy while delving into presentations surrounding transformative advances provided by a variety of disciplines.

I congratulate the Chairperson, Organizing Secretary, Committee Members, coordinator BioLEAGUES and all the people involved for their efforts in organizing the **Rehab E-Con 2022** and successfully conducting the International Conference and wish all the delegates and participants a very pleasant conference.



A. Siddh Kumar Chhajer
Director
BioLEAGUES Worldwide



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From BioLEAGUES CEO's Desk...

It is indeed a privilege to acknowledge and thank all the supporters and organizers of the “*International Multidisciplinary Rehab E-Con 2022*”, who contributed greatly to organize the conference successfully.

I would like to acknowledge and thank the Chief Guest for his/her valuable contribution in the *International Multidisciplinary Rehab E-Con 2022*.

My special thanks to all of our Special Guests who so graciously accepted our invitation to participate in the conference. I also wish to acknowledge and thank the sponsors of the conference whose financial support was extremely grateful.

I would like to specially thank our Advisory Committee Members from various Organization whose continuous support have helped us plan and execute the conference successfully.

I am highly indebted to the contribution given by all the Scientists, Doctors, Research Scholars, physicians sand students to the conference.



Mr. R. B Satpathy
CEO
BioLEAGUES Worldwide



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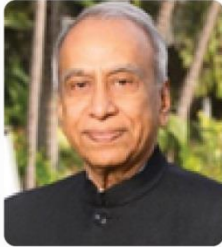
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THE HON'BLE CHANCELLOR



Shri Kamalkishore Kadam

Hon'ble Chancellor

MGM Institute of Health Sciences, Navi Mumbai.

“ An ounce of practice is worth a thousand words ”

- Mahatma Gandhi

Dear Faculties, Students, parents and Friends

I am pleased to know that MGM School of physiotherapy is Collaborating with Association for Clinical Neurology and Mental Health (ACNM) for virtual International Conference “International Multidisciplinary Rehab-E-Con-2022”. In the short span of time MGM School of physiotherapy has made its mark as a provider of quality education. Very often in the academic world, faculty members and senior administrators discuss how to move up the ladder in terms of teaching, research and innovations; or in other words how to make their educational institutes a better place in the country or world. At the same time, in the midst of the serious debate, there is also the realization that nurturing the main stake holders is perhaps the key to a successful institution.

This conference has seen the convergence of renowned academicians and researchers. I congratulate each of them for their efforts and contribution to the global think tank on the very important theme A journey Towards Inclusive Society. I am confident that this occasion will be used to explore new horizons in the fields of Disability and Rehabilitation.

My best wishes to the Principal, neuroscience department and Team along with the participants, best regards for the upcoming international conference.

Good Luck and God Bless You All!

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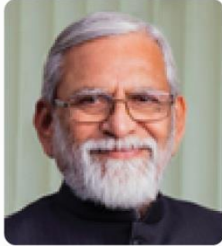
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THE HON'BLE TRUSTEE (GENERAL SECRETARY)



Ankushrao N. Kadam

Secretary, Mahatma Gandhi Mission Trust
MGM University

“ Seek not greater wealth, but simpler pleasure; not higher fortune, but deeper felicity ”

- Mahatma Gandhi

An exuberant congratulation to MGM School of physiotherapy for Collaborating with Association for Clinical Neurology and Mental Health (ACNM) for virtual International Conference on “international multidisciplinary rehab-E-con 2022”. Let us pave way to its commencement with great fervour and supposition for achieving towering standards in the field of academics and other essential skills. “Education awakens the power and beauty that lie within us.” Education does not only mean academic excellence.

Therefore, MGM School of physiotherapy came up with a vision to foster different facets of a student, faculties and professionals in order to see their development as a theme “A journey Towards Inclusive Society”. I'm sure MGM School of physiotherapy will have a meaningful interaction for The conference theme offers Including people with disabilities in everyday activities and encouraging them to have roles similar to their peers who do not have a disability .This involves more than simply encouraging people; it requires making sure that adequate policies and practices are in effect in a community or organization.

Also MGM adheres to the Gandhian ideology of ‘Swarajya’ which personifies individual growth .MGM essentially focuses on imparting education because it serves the purpose of making individuals independent and competent to sustain in the societal pressures they face. I hope the student community & parents will support this new academic venture of MGM trust.

God bless you all and best wishes



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THE HON'BLE VICE-CHANCELLOR



Dr. Shashak D Dalvi

Hon'ble Vice-Chancellor

MGM Institute of Health Sciences, Navi Mumbai

“ The best way to find yourself is to lose yourself in the service of others ”

- Mahatma Gandhi

I am pleased to see that MGM School of physiotherapy have taken a completely new turn for blooming up education system by striving for excellence in every possible field and achieving it in a spectacular way by the upcoming International Multidisciplinary Rehab-E-Con-2022 is about “Inclusive Society”. A committed and supportive institute, and through collaborative efforts can achieve more to benefit for the future leaders of tomorrow.

To be in tune with the trends in Industrial dynamics, MGM school of physiotherapy provide the right Ambience to attain excellence in research, innovations and Studies through appropriate Infrastructural facilities, qualified and inspiring Faculty, well established Library, state-of-the-art Laboratories, Teaching-Learning process and Working Systems. Personality Development and Training in real-time Projects through Institution-Industry-Interaction, help students to emerge as brilliant Technocrats and successful Professionals. The hard work and transparent ethical Practices of Faculty, coupled with the creative intellect of students, help to synergize the efforts of all the Departments to pursue the Vision of a strong and vibrant Institution.

MGM School of physiotherapy Motive is to develop and transform our society through Quality Education. So my best wishes to the team and efforts and upcoming “international multidisciplinary rehab-E-con 2022”

With best wishes



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THE HON'BLE DEPUTY DEAN



Dr. Pravin Suryawanshi

Hon'ble Deputy Dean

MGM Institute of Health Sciences, Navi Mumbai

“ You may never know what results come of your actions, but if you do nothing, there will be no results ”

- Mahatma Gandhi

It gives me immense pleasure to congratulate MGM School of Physiotherapy, Aurangabad, for Collaborating with Association for Clinical Neurology and Mental Health (ACNM) for virtual International Conference on “international multidisciplinary rehab-E-con 2022”. We are striving hard to nurture our next generation for physiotherapy department who will be knowledgeable, skilful, responsible, socially sensitive and globally acceptable for their upcoming international conference themed as ‘A journey Towards Inclusive Society’ I look at this response as a reward for the excellent work and efforts taken by our highly trained faculty members and also due to the acclaimed performance of our alumni in their respective professional careers.

I once again congratulate for your efforts thus empowering you to reach out to the sky and conquer the world of tomorrow & I am glad to know that the MGM School Of Physiotherapy, Aurangabad for upcoming international multidisciplinary rehab-E-con 2022, I wish all the best for the this venture.

All the very best, God bless you all!!!



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PRINCIPAL'S KEY MESSAGE



Dr. Rinkle Malani

Principal

MGM School of Physiotherapy, Aurangabad

“ Service which is rendered without joy helps neither the servant nor the served ”
- Mahatma Gandhi

It is my great pleasure to greet you as the principal of MGM school of physiotherapy. The MGM School of physiotherapy team of teachers, administrators, staff and coaches are truly a talented, caring and committed group of individuals who work hard to ensure that our students and faculties meet their fullest potential. This time department of neuroscience are organizing and collaborating with Association for Clinical Neurology and Mental Health (ACNM) for virtual International Conference “International Multidisciplinary Rehab-E-Con-2022”.

It is the task of the colleges to challenge all faculties along with students to achieve, and to provide opportunities to grow in a positive direction both academically and through co-curricular and extra-curricular activities like clubs, leadership, athletics, drama, band and academic competition teams. We believe that who are actively involved will endure and be set for future endeavors. Each year, the MGM School of physiotherapy develops a new theme based on input from the previous year's conference attendees, which are taken into consideration by the conference chairperson in an effort to reflect inspiring and critical ideas in both fields of Disability and Rehabilitation.

This year, through the input of a number of participants and other professionals. The theme is ‘A journey Towards Inclusive Society’. The conference theme offers Including people with disabilities in everyday activities and encouraging them to have roles similar to their peers who do not have a disability .This involves more than simply encouraging people; it requires making sure that adequate policies and practices are in effect in a community or organization. Disability inclusion allows for people with disabilities to take advantage of the benefits of the same health promotion and prevention activities experienced by people who do not have a disability. The aim of promoting empowerment, and helping to create real opportunities for people with disabilities. This enhances their own capacities and supports them in setting their own priorities. Empowerment involves investing in people in jobs, health, nutrition, education, and social protection. When people are empowered they are better prepared to take advantage of opportunities, they become agents of change and can more readily embrace their civic responsibilities.

With best wishes

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ADMINISTRATIVE HEAD MESSAGE



Mrs. Prerana Dalvi

Administrative Head
MGM University, Aurangabad

“ If I have the belief that I can do it, I shall surely acquire the capacity to do it even if I may not have it at the beginning ”

- Mahatma Gandhi

I am pleased to congratulate for collaborating with Association for Clinical Neurology and Mental Health (ACNM) for virtual International Conference “International Multidisciplinary Rehab-E-Con-2022” and also The MGM School of physiotherapy has been in the forefront of providing professional education and the institution has been consistently known to be dedicated and skilled faculty, excellent infrastructure. Main aims for MGM school of physiotherapy has always been to provide the best to the students and to prepare them to take up the challenges of tomorrow so that when they come out of the institutions, they are competent to handle the responsibilities.

An institution like MGM School of physiotherapy is quite aware of the inherent and potential strength of its faculties, students, parents and alumni, along with that MGM school of physiotherapy also understands and accepts that the students is the perhaps the biggest stake holder that, among other things, provides stability and prospects for better growth. We are quite keen on building a long term growth strategy and development for MGM School of physiotherapy that will have the alumni and industry as our two main pillars that could benefit all stake holders, including students, parents, management and most importantly the society-at-large.

Good luck!!!

The background of the slide is a light green color with a subtle, artistic texture of overlapping brushstrokes. The strokes are more pronounced at the top and bottom edges, creating a frame-like effect around the central text.

Keynote Speakers



Dr. Ken Ware

Head of Research and Development,
Kenware NeuroPhysics Therapy Institute,
Australia



Dr. Geeta Seth

Founder,
Geeta Seth Nutritionist & Dietitian,
Indonesia



Dr. Deeksha Singh

Womens Health Physiotherapist and PFM Specialist,
Perfect Ten Maternity Rehab and Pelvic Floor Physiotherapy Clinic,
India



Shubhajit Bhattacharya

Role Model, Motivational Speaker, Certified Counsellor,
India's First Two-Wheeler Rider Without Both Hands,
India



Dr. Sreekanth T

Mental Health Professional,
Psychiatric Social Worker,
India



Dr. N.S. Senthil Kumar

Chief Operations Officer & Executive Director,
The Association of People with Disability,
India



Dr. Snehal Dharmayat

Associate Professor and Head,
Dept of Community Physiotherapy,
KAHER Institute of Physiotherapy,
India



Dr. Ndahiriwe Chance Christian

General Secretary (Co-Founder) IOSHA Ltd,
Assistant Lecturer,
Department of Physiotherapy,
University of Rwanda, East Africa



Dr. Todd Roberts

CEO & Co-Founder,
Assistive Technology Development, Inc.,
United States



Dr. K. Vadivelan

Professor of Physiotherapy,
SRM College of Physiotherapy, SRM University,
India



Dr. Raj Kumar Yadav

Associate Professor,
Department of Physical Medicine & Rehabilitation (PMR),
All India Institute of Medical Sciences,
India

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ABSTRACTS



Effect of Matrix Rhythm Therapy (Marhythe)© on Active Movements And Nerve Regeneration in Obstetric Brachial Plexus Palsy- A Case Report



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Abstract

Purpose: Obstetric Brachial Plexus Palsy (OBPP) causes injury to the nerve during birth and leads to denervation of muscles and altered biomechanics causing muscle weakness, tightness, restricted range of motion (ROM). All of this leads to functional abnormalities and may interfere with child's developmental milestones. Hence, treatment focusing on altered biomechanics can play a role in achieving developmental milestones and improving functional activities.

Relevance: The conventional physiotherapy for OBPP includes developmental intervention, neuromuscular electrical stimulation, ROM exercises and stretching. Matrix rhythm therapy (MRT) is a novel treatment approach known to synchronise cell frequency with the body to restore disrupted cellular cycle causing effect on nerve regeneration and muscle tightness. But there is dearth in literature regarding effect of MRT in OBPP, hence the case report explores effect of MRT on nerve regeneration and active movements in OBPP.

Participant: Case report was conducted on a 5-month-old infant diagnosed with OBPP.

Methodology: Infant was given 45 minutes of MRT for 8 sessions from neck region to fingers along with conventional physiotherapy. The active movement scale, nerve conduction velocity test, strength duration curve and ROM were used to assess the pre-post outcomes.

Analysis: As it was a single subject study, statistical analysis was not done.

Results: There was improvement from pre to post intervention measurement in active movement that is 59 to 66 and supinator ROM from 48 degrees to 80 degrees. Pre-intervention values of NCV for left median, radial and ulnar nerve were 30.8, 40 and 40 m/s whereas post-intervention values were 43.4, 64.7 and 64.7 m/s respectively.

Conclusion: MRT was found to be effective in improving nerve regeneration and active movements.

Implications: MRT can be given with conventional treatment in OBPP and the effect should be studied on a larger sample.



Keywords

matrix rhythm therapy, nerve regeneration, active movements.



Effect of Motor Re-Learning Program with Motor Imagery on Sit-To-Stand Activity in Stroke



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Abstract

Sit-to-stand (STS) activity being the prerequisite for transfer & ADL, it is necessary to restore upright standing in stroke patients. The cognitive & goal-oriented approaches, Motor imagery (MI) and motor re-learning program (MRP) have been effective on improving STS activity in stroke patients. However, the effect of MI with MRP for better outcome is not known. This study aimed to investigate the integrated effect of MI & MRP on STS activity in stroke. Thirty six acute ischemic stroke patients were enrolled. Patients received MI for 30 minutes/day followed by MRP for 45 minutes/day, five times/week for 3 weeks. The pre & post intervention was assessed with outcome measures like Fugl-Myer Assessment-Lower Extremity (FMA-LE), Motor Assessment Scale (MAS), Kinesthetic & Visual Imagery Questionnaire (KVIQ) and 5-times sit-to-stand (5-times STS). The results showed reduction in sensory & motor impairment (FMA-LE:t-value=397.00), improvement in motor function (MAS:t-value=289.00), better clarity in sensation & image (KVIQ:t-value=137.358 & 132.355 respectively) & ability to perform STS activity improved (5-times STS:t-value=107.00) with $P < 0.001$. The combined approach of MI & MRP designed to improve STS activity in stroke patients was viable in the study. This clinically innovative strategy is effective approach in improving motor functions affecting transfer activities & ADL.

Biography

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Assessing Parental Attitude Towards Play in Children with Special Needs –An Observational Study



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Abstract

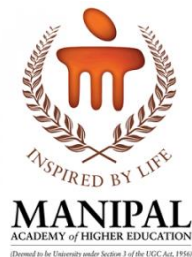
Play is important for normal development of child. The parent involvement in the play differs in terms of their attitude, interaction, commands, time given by them, quality of play and activities. Play of children with special needs is affected due to nature of disability and it is more challenging to initiate and facilitate play in them. Thus it becomes important to assess parent attitude towards play in children with special need. 63 parents of the children with special needs from new-born to 3 years in tertiary care centre from Belgaum were recruited. Parents were given a questionnaire which was explained and were asked to answer the question recalling the play with their child in the past two weeks. Frequency analysis and cross tabulation was used for statistical analysis. Based on frequency analysis, 22% and 20% parent used social play and constructive play for their children respectively. Based on cross tabulation when assessed for play duration, 32 working parent spent maximum time with their children and were more involved in the play compared to non- working parent. The study concluded that most of the parents showed more involvement with the children who need special attention.

Biography

I would like to introduce myself to you. My name is Priya Patel , 2nd year post graduate student, pursuing specialty in Pediatric Physiotherapy at KAHER Institute Of Physiotherapy College. I have completed my bachelors from same college. During internship I have completed one research project. Additionally, have appeared for two workshops and secured a certificate entitled as Hands on Dry Needling and Cupping and Pelvic Girdle Pain Rehabilitation. Currently as a Post graduate student working in 2 research projects.



Understanding Upper Extremity Kinematics during Gait in Children with Cerebral Palsy- A Scoping Systematic Review



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Abstract

Background: Cerebral Palsy, a heterogeneous class of early onset, neuromotor disorder secondary to a non-progressive insult to the developing brain, is one of the most common physical disability during childhood. An extensive variety of gait deviations can be observed in children with cerebral palsy ranging from mild-toe walking to severe- crouch gait depending on the location of the brain damage and subsequent musculoskeletal deformities. The upper extremity movements play a very important function in progressing and assisting the body advancement during human walking.

Objective: The study aims to understand the effect that gait associated with different topographical presentation with cerebral palsy can have on the upper extremity posturing.

Methodology: A thorough data search was carried out on databases like PubMed, Scopus, Web of Science, PeDro, EMBASE to include articles published between 2000 - October 2021. Retrieval of full text studies, methodological quality assessment, and data extraction was done by independent reviewers.

Results: A total of 2576 articles were procured from the primary data search out of which 8 cross-sectional observational studies were included in this qualitative study. Upper extremity kinematics was the outcome measure studied during gait and the result showed abnormal upper extremity movement in CP population compared to typically developing children. Variations were also observed between affected and affected side of hemiplegic CP.



Conclusion: According to this review, the abnormal upper limb posturing could be considered as a strategy to optimize gait by keeping posture and balance control. Thus, upper limb must be integrated into rehabilitation programs to improve inter –limb coordination.

Keywords

upper extremity kinematics; gait; cerebral palsy

Biography

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Area of interest: Neuropediatrics



Indian Caregivers' Acceptance of their Child's Diagnosis and Perspectives of their Child's Care



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Abstract

Among South Asian countries such as India, Sri Lanka, Bangladesh, autistic children are reported to make up approximately 0.09% - 10.7% of those birth to 17 years of age. Cultural differences in the understanding of autism, combined with limited knowledge about autism or the availability of services, has been shown to greatly impact a family's wellbeing. As caregivers are often the gatekeepers to the success of autistic youth, particularly at young ages, it is necessary to understand their perspectives to better guide them to resources. Thus, the primary aim of the study was to explore how Indian caregivers perceive the acceptance of their child's diagnosis; and how might Indian caregivers' perceived acceptance be influenced by stress, uncertainty, and knowledge of or attitudes about autism. A convenient sampling of 29 caregivers from urban settings in India was done by circulating an online survey questionnaire through physical therapy clinics and social media groups. Data were analyzed quantitatively for the overall views of caregivers for acceptance, followed by exploring differences among these caregivers based on demographic variables such as the individual's perception of their own reaction to their child's diagnosis, the response of their spouse, as well as the perceived response from society. The results from the study suggest that though the presence of accepting views were evident among caregivers, there was a significant difference between the groups having a perceived positive response (PR), moderate response (MR) and negative response (NR). These findings suggest that empowering caregivers with knowledge about autism is an important first step to ensuring the acceptance of their child's diagnosis. Moreover, positive attitudes toward their child's diagnosis can impact the self-reported stress and uncertainty that caregivers experience.



Effect of Mental Fatigue on Mindfulness in Exam Going Students- A Cross Sectional Study



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Abstract

Introduction: Mental fatigue is a psychobiological state caused by prolonged periods of demanding cognitive activity which results in slower reaction times and attention deficits. Mindfulness is maintaining a moment-by-moment awareness of our thoughts, feelings, bodily sensations, and surrounding environment. Exams may result in mental fatigue, poor academic performance and low functional efficiency which may affect the ability to focus and impacts the capacity of performance of exam going students.

Aim: To determine the effect of mental fatigue on the mindfulness of students during examination and how does it affect their performance.

Methodology An Observational study carried out among 81 students of age group between 18-24 years. This study includes UG students appearing for exam. The students who were not appearing for examination were excluded from the study. The outcome measures used were Mindfulness attention and awareness scale and fatigue assessment scale.

Result: The test used for correlation between Mindfulness attention awareness scale and fatigue assessment scale was Kolmogorov - smirnova test which showed statistically significant result with p value <0.005.

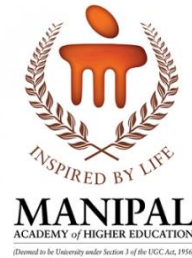
Conclusion: The study demonstrated there was significant correlation between Mental Fatigue on mindfulness in exam going students.

Key words:

Mental fatigue, Mindfulness, students



Effects of Dual Task Training on Balance and Mobility in Stroke Patients- A Narrative Review



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Abstract

Background: The decline in mobility post-stroke along with postural instability, lead to falls, which is a common issue in post-stroke individuals. Falls result from the incapacity to adequately allot attention to two tasks simultaneously. To enable reintegration of stroke survivors into the community, the ability to concurrently perform two tasks and properly divide attention between them is required, which can be accomplished using dual task training programs. **Objective:** This narrative review is aimed at understanding the effects of dual task training on the balance and mobility of stroke patients.

Methodology: An extensive search for relevant papers was carried out from 2012 to June 2021, in the following databases: PubMed, Scopus, Web of Science, PEDro, EMBASE, Cochrane, PROQUEST and Google Scholar. Original, full text, published papers with completed Randomized Controlled Trials (RCTs) were included.

Results: A total of 998 articles were procured from the primary data search out of which 13 randomized controlled trials were included in this qualitative study. All the studies used some common outcome measures to assess cognitive impairments, balance ability and gait performance in stroke patients, before and after dual task training.

Conclusion: According to this review, dual task training has been found to enhance the balance and gait abilities of stroke patients. This review can also help in forming effective treatment



strategies focused on- prevention of falls in the future, enhancing gait performance and balance abilities of stroke survivors.

Keywords

stroke, dual task training, balance, mobility, postural instability, falls

Biography

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Area of Interest: Adult Neurosciences



Quadriparesis with Loss of Vision: Think of NMOSD



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Abstract

Quadriparesis in neurology is a worthwhile diagnostic entity of clinical acumen. Acute causes of quadriparesis includes disorders of spine, nerves and rarely brain. Loss of vision is a significant disabling state and should be managed as early as possible. This 10 year old girl presented with acute onset progressive weakness of all four limbs for 30 days. After 7 days, she complained of acute onset blurring of vision in both eyes followed by bilateral painless loss of vision within 2 days. Her neurological examination revealed normal sensorium, best vision of perception of light positive bilaterally, bilateral dilated pupils with sluggishly reacting pupils without evidence of RAPD, blurred disc margins, no evidence of restriction of ocular movements, or presence of nystagmus, with normal rest of the cranial nerves, hyperreflexic quadriparesis of all limbs with non-elicitable plantar response without evidence of involvement of sensory/bladder/bowel/ cerebellar or autonomic nervous system. Her spine imaging showed evidence of cervical myelitis from C2 to C5 segment of spinal cord. Her visual evoked potentials (VEP) revealed prolonged P100 latencies bilaterally. She was diagnosed clinically as Neuromyelitis optica (NMO) based on myelitis with bilateral optic neuritis and treated with intravenous immunoglobulin (IVIG) and pulse steroid therapy. Her blood sample came out to be negative for anti-aquaporin antibody and she was labelled as sero-negative Neuromyelitis optica spectrum disorder (NMOSD). She was started on azathioprine and oral steroids and there was good improvement in her power of limbs and some improvement in her vision (up to finger counting 3 metres). Immune therapy or plasma exchange along with pulse steroids given early in the course of illness can lead to better outcome. There should not be delay in waiting for antibodies to be proven for diagnosis, rather a clinical suspicion in presence of disabling loss of vision with evidence of myelitis can itself substantiate initiation of therapy in NMOSD.

Biography

Dr Rajarshi Chakraborty is presently doing residentship in Neurology department in King George Medical University, India. He is a keen observer and has interest in research work in immunological pathophysiologic workup. He has presented multiple posters and oral presentations in neurology and has a dedication for reporting versatile cases of special significance for propagation of knowledge and clinical wisdom in medical profession.



Efficacy of Mobile-Based Applications on Motor Recovery and Physical Function in Stroke Rehabilitation: A Systematic Review



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Abstract

Background: Stroke is one of the leading causes of disability globally, resulting in motor deficits such as reduced mobility, limitations in activities of daily life and participation in society thereby leading to an overall decrease in quality of life. Health related utilization of wireless internet is on the rise, thus catalyzing the emergence of mobile health or m-Health, particularly in stroke rehabilitation. Especially in this unforeseen pandemic situation, the emergence of technology in rehabilitation reiterates the use of mHealth as a possible strategy to health care providers.

Objective: This systematic review aims to determine whether there is any evidence to support the use of mobile health applications in the motor recovery and physical function in stroke rehabilitation.

Methods: A comprehensive data search was done using PubMed, Scopus, Web of Science and PEDro for RCTs, clinical control trials and pilot studies that examined efficacy of mobile-based applications on motor recovery and physical function in stroke rehabilitation. The methodological quality was estimated by using the Physiotherapy Evidence Database (PEDro) scale.

Results: A total of 209 articles were retrieved from the primary data search out of which six articles were included in the review. All the included studies have a PEDro score of 6 (good) and above. Two studies used mobile applications to improve motor recovery, reported as improvements in upper extremity impairments whereas the other four reported improvements in physical function using the 10MWT and 6MWT outcome measures. All the studies except the one reported greater improvements in the outcome measure assessments in experimental group as compared to the control group.



Conclusion: For clinical practice, mHealth intervention may provide an alternative intervention strategy to health care providers or may be used as an adjunct to home exercise program in order to improve motor recovery and physical function of post stroke survivors.

Keywords

stroke, mobile health applications, motor recovery, physical function

Biography

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Factors Influencing Community Reintegration in People with Stroke: A Systematic Review



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Abstract

Background : Stroke is one of the leading neurological conditions in the world associated with long term physical deficits. These physical deficits often cause a hindrance in performing activities of daily living (ADLs) and also cause difficulty to undertake personal and social responsibility and return to work. Community reintegration is the process of incorporation of an individual into the community and a possible return to work. Physiotherapy and rehabilitation are primary treatment choices after stroke to achieve community reintegration.

Objective: This systematic review aims to identify the factors which influence the community reintegration of individuals with stroke and categorizing these factors into barriers and facilitators.

Methodology: A comprehensive data search was performed using PubMed, Scopus, Web of Science, PEDRO, Cochrane, ProQuest and EMBASE databases from 2014 to August 2021 by two reviewers. Retrieval of full-text studies, methodological quality assessment, and data extraction was carried out by the two independent reviewers.

Results: A total of 1466 records were retrieved and 15 articles were included in the review. Some of the barriers identified were advanced age, presence of comorbidities, and poor cognitive function whereas the facilitators to community integration were early intervention, access to rehabilitation, and less severity of stroke.

Conclusion: This review identified the factors influencing community reintegration after stroke. The modifiable barriers and facilitators should be considered for a successful transition of individual into the society. Future studies should target developing interventions for promoting community reintegration.



Biography

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Outcome Measures Used for Urinary Incontinence among Stroke Subjects- A Narrative Review



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Abstract

Background: Urinary incontinence (UI) is defined as "the involuntary loss of urine that is a social or hygienic problem" by the International Continence Society. Post-stroke there is 28-40% incidence of urinary incontinence in patients due to which there is adverse impact on physiological and psychological function in patients. Relationships, activities of daily living, and quality of life are also affected. Lack of central bladder inhibition leads to urinary incontinence after stroke.

Objective: The aim of the narrative review was to know merits and demerits of the outcome measures used to assess urinary incontinence in stroke subjects.

Methodology: A comprehensive data search was performed using PubMed, Scopus, Embase, Pedro and Web of science databases from 2010 to 2021. Full text studies on stroke subjects with incontinence were retrieved.

Results: a total of 1036 records were identified from different databases, out of which duplicates were eliminated and 989 studies were retrieved. On title and abstract screening could identify 195 studies which were further deduced to 37 as they did not match inclusion criteria. Total of 19 studies were included in this study. These studies have used 26 outcome measures for assessing incontinence in stroke subjects. It included self-reported questionnaire, medical professional administered scale, quality of life scale/ questionnaire, activity of daily life scale and objective assessment.



Conclusion: Various studies have used scales assessing UI and scales which affect the functional status and quality of life. Two or three scales were used in combination to evaluate UI and activity of daily life or quality of life questionnaire. These reviewed studies did not mention about the ease and duration required to assess using a particular scale.

Keywords

Outcome measures, Urinary incontinence, Stroke

Biography

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Area of Interest: Adult Neurosciences



Problems Faced By Caregivers/Parents of Children with Neuromotor Problems during Covid-19 Pandemic



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Dr. SNEHAL Ghode

Principal of MAAER's physiotherapy college, India

Abstract

Background: In March 2020, the World Health Organisation declared the situation a pandemic and lockdown was established to limit the spread of the infection of coronavirus disease 2019 (COVID-19). In this situation, schools were closed, the possibility to go out was limited and rehabilitation and medical follow-up were interrupted. The sudden and unexpected changes induced by the lockdown created new difficulties and needs for children with disabilities and their parents. The pandemic is likely to have a large impact on the health of these children, including their physical, mental and social well-being. The child's condition may deteriorate if the rehabilitation is not continued.

Purpose: The aim of the study is to help us gain information about the challenges faced by the caregivers, continuity of rehabilitation and parental concerns during the COVID-19 lockdown. This study will be done to identify the potential health care issues relating to well-being of the children with neuromotor disability. By this study therapists will be able to give feasible and effective solutions and can plan the rehabilitation accordingly. To prevent further deterioration of the condition of the child therapist should know the problems faced by the parents/caregivers.

Methodology: In this survey 100 subjects are selected including caregivers of the children with neuromotor problems aged 0 to 18. Subjects are excluded if child is not living at home during lockdown or Completion of questionnaire is done by a person other than parent. Study is conducted using a self-constructed questionnaire which will be done on the interview basis. Data will be collected and qualitative analysis will be done.

Results: Awaited.

Conclusion: Awaited



Biography

My name is Gayatri Panchal and I am an intern at MAEER's physiotherapy college, Talegaon Dabhade. This is my first paper presentation. I am interested in doing research in neurophysiotherapy in paediatric population. I am looking forward to this as a learning experience to improve my knowledge.



A Pilot Study: “Comparison between body awareness therapy and dance movement therapy in children with autism to improve body awareness, communication and quality of movement



Rakesh M. Solanki

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Abstract

Purpose: This pilot study compared body awareness therapy and dance movement therapy in 10 children, 5 Children treated with body awareness therapy and 5 Children treated with Dance movement therapy with autism to improve body awareness, communication and quality of movement.

Methods: 10 Patients systemically into two groups. In first group of 5 patients treated with body awareness therapy and second group of 5 patients treated with Dance Movement therapy. First severity of Autism measured by Indian Scale for assessment of Autism (ISAA), than Rate of behaviors compared with Child Autism rating scale, communication compared with social communication questionnaire and quality of movement measured with body awareness rating scale. Study completed within 2 month.

Results: Compared two treatment body awareness therapy versus Dance movement therapy and measured outcomes pre and post treatment. Outcome measures body awareness rating scale, Social communication questionnaire and child autism rating scale were measured. Participants of Autism with age group of 4-18 years shows better prognosis by Dance movement therapy than basic body awareness therapy in above outcome measures.

Conclusions: These findings indicate significantly improved conditions of participants with autism by Dance movement therapy. The findings also enhance our understanding of Dance movements improved deficits in persons with Autism, and have used theoretical as well as clinical implications.

Key Words: Indian Scale for assessment of Autism (ISAA), Child Autism rating scale, social communication questionnaire, body awareness rating scale, Dance Movement therapy, body awareness therapy

Biography

Rakesh M. Solanki is currently working as Clinical practitioner (Mangalmurti Physiotherapy clinic in surendranagar). He is doing PhD on Autism child. He had 5 year academic experience as Lecturer/In charge principal at shree B.D.Barad physiotherapy college- kodinar. He had done MPT(Neuro) in C.U.Shah physiotherapy college, Surendranagar



Correlation of New- Lucerne ICF-Based Multidisciplinary Observational Scale (LIMOS) and Stroke Specific Quality of Life (SSQOL) Scale in Chronic Stroke Patients



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Dr. Sayli Paldhikar

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Dr Snehal Ghodey

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Abstract

Background: Currently, an estimated 105-152/100,000 per year stroke survivors in India cope with significant physical, cognitive and emotional deficits and experience disability in performing Activities of Daily Living (ADLs) years after discharge from the hospital, affecting their quality of life (QOL) altogether. Several patient-centered outcome measures are available for assessing quality of life in chronic stroke patients, the commonly used scale being SSQOL, but since LIMOS is an ICF based scale for determining difficulty during ADLs, it may provide a better insight for deciding QOL in domains relatable to the ICF. LIMOS describes the possibilities of a patient in performing activities, irrespective of whether the recovery involves restorative (e.g., without hand splint) or compensatory strategies (e.g., with hand splint) and also takes into consideration physical, social, family and environmental domains of QOL

Purpose: Since LIMOS is based on the WHO ICF model, it provides a common understanding and language of functioning, disability, and health used by physicians, nurses, therapists, and other health professionals. Correlating LIMOS and SSQOL, will help establish its concurrent validity and will help to measure specificity and sensitivity of LIMOS as a quality-of-life scale.

Method: In this correlational study, 10 chronic (post 6 months) stroke patients (male/female) are selected using sample size formula. Demographic data of the participants is collected; LIMOS and SSQOL scale is being administered through face-to-face interview method. The subjects excluded are those with poor cognition, impaired speech and difficulty in hearing. Comparing the domain scores of both the scales (LIMOS and SSQOL) correlation will be assessed using Pearson's Coefficient correlation formula.



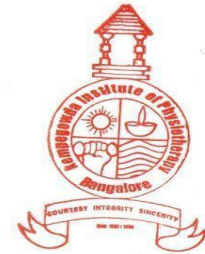
Results: Awaited
Conclusion: Awaited

Biography

My name is Sneha Dutta, and I am an Intern, from MAEER's physiotherapy college. I have always been very keen in doing research work along with academics throughout my Bachelor's degree. It's my first-time presenting paper on such a huge platform and look forward on gaining a positive experience.



A Study to Determine the Effect of Abdominal Hollowing On Gait and Stair Climbing In Patients with Stroke



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Abstract

Stroke is one of the leading cause of disability and globally it is the second leading cause of death. Most of the patients post stroke complain of limitations in the activity such as self-care activities, walking, stair ambulation and restrictions in participation. This is a Single group observational pre and post-test study design, where 36 patients performed abdominal hollowing using pressure biofeedback along with conventional physiotherapy exercises for 4 weeks. outcome measures DGI showed difference of -6.25, pre-test mean of 12.06(SD 2.76) and post-test mean of 18.31 (SD 3.7) at end of 4th week. TUG showed difference of 7, where pre-test mean of 31.5 (SD 5.77) and post-test mean of 24.5 (SD 5.49) at the end of 4th week. For TUDS Mean of 82.89 (SD 16.91) in pre-test, and 66.06 (SD 15.22) in post-test. For SIS mean of 52.06 (SD 8.89) in pre-test and 65.22(SD 7.03) in post-test at end of 4th week. In conclusion, results showed that abdominal hollowing was effective in improving the gait and stair ambulation among the stroke patients, which help them to gain mobility and improve functional ability.

Biography:

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Prevalence of Hindfoot Deformities in Different Age Groups in Children with Cerebral Palsy



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Dr. Snehal Ghodey

Principal of MAEER's Physiotherapy College, Talegaon Dabhade, India

Abstract

Background: Cerebral palsy is a non-progressive neurological disorder, commonly associated with foot deformities such as calcaneal valgus and excessive pronation. This leads to an altered lower limb alignment and abnormal kinematics which consequently leads to abnormalities in posture, balance and gait. Various interventions such as osteotomies, tendon release, botulinum toxin injections and use of ankle-foot orthoses are done to correct and maintain normal alignment in this condition. Purpose: The evolution in foot posture and deformities in cerebral palsy children is to be seen with advancing age and corrective interventions; which help maintain normal bony alignment and kinematics. After corrective interventions and therapy, the changes in foot posture and muscle activity play a vital role in the balance and gait. The aim is to check the prevalence of hind-foot deformities in cerebral palsy children across different age groups. The objective is to assess foot posture using Foot Posture Index – 6 and sort the values according to age groups and interventions. This may have implications on further management of their deformities. Methodology: In this descriptive study, 153 children with cerebral palsy are taken from the Neuro OPDs and Special schools in Mumbai, Talegaon and Pune using purposive sampling. The foot posture is assessed using FPI - 6, with the subjects in a relaxed stance, supported standing position, barefoot with double limb support on an evenly leveled surface/platform with the help of an assistive device. The data of the final FPI scores is collected according to age groups of below 5 years, 5 – 8 years, 8 – 11 years, above 11 years; and interventions. All the data is



presented in the form of graphical representation for statistical analysis. Result: Awaited.
Conclusion: Awaited.

Biography:

Good morning respected sir/ma'am, I am Chinmay J. Karekar, a resident of Kalwa, Thane, and currently an intern in MAEER's Physiotherapy College, Talegaon Dabhade; having completed my bachelors here in the batch of 2017. I am a fresher and this is my first time in the research process and in submitting abstract. I am very grateful for this opportunity on this platform.



The Effect of Retro Walking Training with Visual Feedback on Balance and Gait in Stroke Patients



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Abstract

Stroke is a neurological deficit, which results in balance impairments and gait dysfunction. Besides various approaches in post-stroke rehabilitation, retro walking training is an emerging one; however, its application along with visual feedback is limited. Visual Feedback is a valuable adjunct therapy for stroke patients to promote motor re-education. This study aimed to assess and evaluate the effectiveness of retro walking training with visual feedback on balance and gait in stroke patients. Thirty-six subjects with ischemic stroke participated in 20 sessions that included 30 minutes of overground Retro Walking Training along with Visual Feedback, and was evaluated using Berg Balance Scale (BBS), Timed Up and Go Test (TUG), Functional Gait Assessment (FGA), 3-metre Backward walk Test(3MBWT) and Stroke Impact Scale (SIS). Following statistical analysis, significant gains were noted in balance (38.77 ± 4.98 to 46.80 ± 4.22), TUG score (of 26.11 ± 6.20 to 21.71 ± 5.39), backward gait speed (0.17 ± 0.04 to 0.23 ± 0.07 m/s), FGA score (12.08 ± 4.58 to 18.97 ± 3.91) and SIS score (42.94 ± 11.33 to 55.05 ± 10.80). Retro Walking Training with Visual Feedback could serve as a beneficial rehabilitation tool by improving balance control and gait performance in stroke patients.

Biography

Nandhini. S. R, MPT student, Kempegowda Institute of Physiotherapy, Bengaluru, Karnataka.

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Impact of 5 week Relaxation Technique (Progressive muscle relaxation and Guided Imagery) on Quality of life using PDQ-8 and Level of Anxiety using Beck Anxiety Inventory in patients with Parkinson's : A Pilot Study



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Abstract

Purpose: To explore the effect of E-Relaxation protocol in improving the quality of life and reducing the anxiety level

Background: Due to the various motor and non-motor symptoms of Parkinson's, Quality of Life is an outcome largely affected. The sense of well being is central to the concept of quality of life. It refers to the patient's own evaluation of the impact of the disease and includes physical, psychological (anxiety and depression) and socioeconomic dimensions and its measurement is of paramount importance in evaluating research outcomes.

Methodology: 5 patients were selected to be a part of this pilot study. After obtaining an informed consent from them, their quality of life and level of anxiety was assessed using PDQ-8 questionnaire and Beck Anxiety inventory Scale respectively. The E-Relaxation protocol was implemented over a period of 5 weeks, twice a week, each session being 30-40 minutes. Following the intervention, both the scales were taken again and the changes in data were observed and noted.

Result: Awaited.

Conclusion: Awaited.

Biography

I am Chandni Sanghavi from Maeer's physiotherapy college. I am an intern and very keen to learn various things in this field. I am presenting my research paper for the first time on such a big platform.



Syndromic Retinitis Pigmentosa Associated With Hallgren's Syndrome-A Rare Case Report Study



Dr. Binayak Bibek Das

Vinayaka Mission's Kirupananda Variyar Medical College and Hospitals, Vinayaka Mission's Research Foundation, Salem, Tamil Nadu, India

Abstract

4⁵ years old woman mentally disabled with Congenital speech and hearing impairment (congenital deafness) came to our OPD with chief complains of defective vision in both of her eyes for past 1 year. She had R/E mature cataract and L/E Immature cataract with NSG-3. Under challenging circumstances due to her agitated and treatment resistant behaviour we sedated her under general anaesthesia and R/E phacoemulsification was done and foldable PCIOL was implanted. On further Examination patient had B/E Retinitis pigmentosa. NCCT brain showed cerebral and cerebellar atrophy. She was also diagnosed to have vestibulo-cerebellar ataxia. Further investigations and details of the patient will be discussed.

Hallgren's syndrome diagnosis is based mainly on clinical findings so since all the four entities of Retinitis pigmentosa, mental deficiency, congenital sensorineural deafness and vestibulo cerebellar ataxia were present, we treated it as a case of Hallgren's syndrome. In this syndrome, ocular and aural symptoms are not treatable but mental deficiency can be treated to a great extent. Exact gene background has not been found. This study has been taken due to its rarity and extreme difficulties because of subnormal intelligence and violent aggressive behavior of the patient and the challenges to operate for cataract under general anaesthesia

Biography

Myself Dr. Binayak Bibek Das, an Ophthalmology Post graduate resident 2nd year studying at Vinayaka mission's kirupananda variyar Medical College and hospitals, Salem, Tamil Nadu. This is my own piece of rare study which I found at my opd setup. Mental deficiency and disability is a very big social stigma and being blind along with it adds a long unending saga, Being an eye surgeon, I want the world to see through my eyes by preventing their blindness of any form be it cataract, refractive errors, glaucoma, diabetic and hypertensive retinopathy



Psychometric properties of balance outcome measures evaluating systems and ICF domains in individuals with Type 2 diabetes mellitus: A Narrative review



Brahambhatt D

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Abstract

Type 2 Diabetes Mellitus (T2DM) is associated with balance deficits. Bernstein emphasized that postural control results from a set of 6 interacting systems- biomechanical constraints, verticality, anticipatory, reactive, sensory orientation, and gait stability. Balance disorders influence independence, activities, and participation. Although various balance measures are available, it is uncertain which measures are the most appropriate for T2DM population. The objective of the review is to identify the balance systems and ICF domains evaluated in outcome scales used for balance evaluation in individuals with T2DM and determine psychometric properties of the same. A literature search with key terms publication year, balance scales, systems, ICF domain, validity, and reliability yielded 123 studies out of which 20 were selected. 11 different balance outcome measures were included in the study: Dynamic balance test, Balance walk, Tandem and Unipedal stance, Functional reach test, Berg Balance Scale (BBS), Performance Oriented Mobility Assessment (POMA), Activity specific balance confidence scale, Timed Up and Go, Dynamic Gait Index, and Balance Evaluation Systems Test (BESTest). Out of these scales, BESTest, BBS, and POMA assessed majority systems. BBS and BESTest have strong concurrent and convergent validity in T2DM population. BBS has good inter-rater, intra-rater reliability. These scales assess balance at body function, structure and activity restriction level. Psychometric properties of other scales are unexplored. Few studies assess balance at participatory level in T2DM. The review concluded numerous scales are used for assessing balance in T2DM; however, most of these scales have not been validated and do not assess the 6 underlying systems. ICF domains assessed were limited to activity restriction. Psychometric properties of other measures are unexplored and neither scale evaluates participation. Identifying and constructing a new measure that encompasses systems and ICF domains is essential.



Biography

I am Ms. Dollar Brahambhatt, currently pursuing Masters in Physiotherapy in Neurosciences from CHARUSAT university. My alma mater is Krishna Institute of Medical Sciences, Karad. I have attended the conference, “Knospe” organized by Krishna College of Physiotherapy. I have presented in an e-symposium titled- Key Determinants of Learning Motor Behavior, available on YouTube. A presentation on “Effects of Virtual Reality in Neurorehabilitation” in faculty-student collaborative symposium on Technology Based Interventions in Neurorehabilitation: An evidence update. I have two published studies, “Quality of life assessment in breast cancer females before and after one month of modified radical mastectomy” and “Effect of video-based rehabilitation as an adjunct to physiotherapy in post stroke patients”



Effect of Home Based Rehabilitation on Gait in Patients with Parkinson's disease: A Systematic Review



Sumam Sunny

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Abstract

In this era of COVID pandemic and rising concerns of COVID third wave most of the patients prefer home based rehabilitation. PD is progressive and chronic in nature hence it is essential that exercises prescribed are sustainable and consistent over a long period of time. Most of PD patient face difficulty in walking. Home-based rehabilitation is an option of choice that has the potential to be sustained over a long period of time. There is a lack of reviews that have explicitly searched on the home based rehabilitation, so the objective was to identify the effects of home based rehabilitation on gait in PD. Electronic databases PubMed, PEDro, GOOGLE SCHOLAR and COCHRANE LIBRARY were searched for articles. The included studies had participants diagnosed with PD, gait outcomes assessed and articles published in the last 10 years in English language. Data analysis and risk of bias of included studies assessed was done using RevMan 5.4.1 software. Sixteen trials including 828 participants met the inclusion criteria. Six trials compared with center based exercise. Six trials compared with different home based exercise. Four trials compared with usual care or no intervention. After intervention no clear difference for TUG. (SMD 0.25, 95% CI 0.19 to 0.77) between home based and center based group was found and while comparing with different home based exercise, no clear difference on stride length was observed. (SMD 0.20, 95% CI 0.15 to 0.55). Findings provide information of current intervention methods, impact of location and technologies used at home for gait training in Parkinson's. However, heterogeneity of included studies and analysis shows no significant between group difference, hence further studies are needed to conclude with certainty.



Biography

I am Purvi Doshi, Intern at Charusat University. I have participated in blog writing competition in E-Physiocon and GAPT and also attended national and international E- conferences. I have also completed short duration online courses related to physiotherapy which include yoga and health care and also completed the BLS, ACLS, PALS and dry needling course. My research interests include topics related to Neuro-rehabilitation and oncology.



Effect of Awareness Program in Learning Home Modifications in Stroke Patients



Kadam RUCHIRA

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Grover PRANJAL

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Abstract

Stroke is a condition characterized by motor deficits like hemiplegia and hemiparesis. Stroke survivors face a heightened fall rate and an increased risk of getting injured post attack. Fear of falling is a common consequence of falls. The various sections of house limit the stroke patients to different degrees. Reason was to focus directly on health related environmental supports in stroke patients, as more attention is drawn towards the patient's overall health and impairments. Therefore, goal of this study was to find out the effect of awareness program in learning home modifications in stroke patients. A total of 45 stroke patients within 3-6 months' onset, with normal higher functions were included in study. Awareness information was imparted to the participants on a one on one basis in written as well as pictorial depiction in form of posters. Paired t-test was used for comparing pre and post test scores, p value was calculated $<.0001$ was considered significant. Therefore, there was a significant change in knowledge of the participants post awareness program for home modifications in stroke patients

Biography

Ruchira Rajesh Kadam

Intern at Lokmanya Tilak College Of Physiotherapy, Khargar, Navi Mumbai.



Combined Effect of Yoga and Aerobic Exercise on Mild Cognition Inpatients with Alcohol Use Disorder”- An Experimental Study



Ashlesha Vaidya

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Abstract

Introduction: Alcohol is the most frequently used mind-altering substance in the world. Alcoholism is constantly associated with neuropsychological impairments with respect to cognitive flexibility, problem-solving, decision-making, risky behaviour, and further aspects of cognitive function.

Aim of the study: To evaluate the effectiveness of combination of yoga and aerobic exercise on Mild Cognition in Patients with Alcohol Use Disorder.

Methodology: The study included 30 individuals, 15 in each group with AUD and age >18 years. The participants included were aged 18 or above, diagnosed with DSM -5 Criteria for AUD and mild cognition impairment with MOCA score (19-25). The intervention included combination of Yoga and Aerobic exercise for 30 minutes, 3 sessions per week over a period of 3 weeks. Patients were assessed at baseline and at the end of the intervention, using Montreal Cognitive Assessment Scale.

Results: There was a statistically highly significant change in the outcome measure of MOCA with p value < 0.001*).

Conclusion: The study concluded that combination of yoga and aerobic exercises on Mild Cognition in Patients with Alcohol Use Disorder was beneficial in the improvement of cognition.

Keywords

Alcohol Use Disorder, Yoga, Aerobic Exercise, Physical Therapy.



Effect of cognitive motor dual task training and auditory synchronized motor training on cognitive functioning and balance in acute stroke-A Comparative study



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Borkar T

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Abstract

75% stroke patients suffer from disorders involving daily living activities. One of the most important functional disorders of patients with hemiplegia after stroke is the loss of balance. Stroke patients have lower attention than healthy people. Daily activities demand performance of dual-tasks which reveals a problem in balance that causes falls during activities of daily living. To solve this problem, the abilities to integrate two tasks and properly distribute attention through the tasks, dual task training is needed. The purpose was to study the effect of cognitive motor dual task training and auditory motor synchronization training on cognitive functioning and balance using Trail Making Test and Berg Balance Scale in acute stroke. Comparative study with simple random sampling of 20 participants having hemiplegic stroke with disease duration <6 months was conducted. Patients were randomly allocated to: Group A who received Cognitive motor dual task training + Conventional training and Group B who received Auditory Synchronized Motor training + Conventional training for 3 times per week for 6 weeks. The cognitive functioning and balance was assessed using TMTA and TMTB and Berg Balance Scale respectively. Measures were taken at pre intervention, 2 weeks and 6 weeks after intervention. Seventeen participants completed the study (CMDT n=10, ASMT n=7). The study showed that both training groups significantly improved cognitive function at 6 weeks with $p<0.001$ for TMTA and TMTB. Balance also showed significant improvement at 6 weeks with $p<0.001$ for BBS in both groups. There were no significant between group differences in cognitive function and balance. The study concludes that, cognitive function and balance increased significantly in the participants in both groups. Between group differences showed no significant changes.



Biography

I, Miss. Disha M.Shah, am a second year post-graduate student specializing in Neurosciences Physiotherapy at Dr. A.P.J. Abdul Kalam College of Physiotherapy, Loni. I have persued my under graduation from Tilak Maharashtra Vidyapeeth, Pune. I have publication in Journal of Advanced Scientific Research in the year 2020 titled- “Effect Of Core Stability, Dual Tasking And Sensory Strategies On Balance And Gait In Multiple Sclerosis Patients”.



Physiotherapeutic Management of Hydrocephalus – Review



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Sant Namrata

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Naik Ketaki

Intern at MGM School of Physiotherapy, Aurangabad, India

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Abstract

Hydrocephalus is a dynamic imbalance between the formation and absorption of Cerebrospinal fluid (CSF) resulting in an excessive accumulation of CSF within the ventricles of the brain. Dr. Walter Dandy based on his first study classified hydrocephalus as either “communicating” or “obstructive or non-communicating” in nature. Hydrocephalus children show the following signs such as low level of consciousness, gait impairment, headaches, vomiting, nausea, enlargement of ventricles, head circumference is increased, and sunset sign. The highest incidence of hydrocephalus is assumed to be around 85 per 100 000 population, with a notable difference among age groups: 88 per 100,000 in children and 11 per 100,000 in adults. Based on the demographic and chief complaint by the informant along with birth history, history of present illness consisting positive factors like history of fever, vomiting, abnormal eye movement, delayed history of gross and fine motor milestone. Observation includes assessment taken in the supine position, including head and face with enlarged head circumference, dysmorphic face features, and drooling of saliva. The physiotherapy rehabilitation provides parents counseling related to the handling of the baby due to increased circumference of the head along with the surgical procedure being done. Respiratory care to provide improved ventilation. Cuevas Medek Exercises for enhancement of motor development of the child. Weight-bearing position and transfer to decrease the spasticity within the muscles. Stretching and use of splints for improving range of motion and contractures. Trunk control along with head control for the transition of the child. Strengthening of the upper extremity muscles to make the child independent about the daily activities.



Safety and Feasibility of Subject Specific Integrated Multisensory Stimulation Program (SSIMS) for Subjects with Severe TBI in Acute Setup- A Pilot Study



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Abstract

Background and Purpose: Very early stimulation, with an emphasis on functional task and personal salience in an integrated manner that targets multi-sensory system may contribute to improved outcomes for subjects in coma following traumatic brain injury. We hypothesized that a very early stimulation protocol of such nature would be safe and feasible

Introduction: Each year almost 1.5 million people experience TBI resulting in 52000 deaths. Among which 90,000 experience severe injury leading to long term disability like Coma. Sensory stimulation proves to be effective in reducing the duration of unconscious state. The underlying theory is that “subcortical connections are in some sense ‘not firing’ or working at reduced efficiency and that stimulation may therefore provide arousal procedure for pathway that are compromised but not destroyed. The type of sensory stimuli that optimally improves arousal has not been addressed in the sensory stimulation literature. Hence this study will focus on effects of various functional stimuli that can be applied to the patient in a way that it has an associated meaning with it. Hence the objective of my study is to assess the effectiveness, safety and feasibility of a newly developed protocol (SSIMS) for patients in coma following traumatic brain injury to improve arousal.

Methodology: We performed a randomized, controlled trial with blinded outcome assessment. Patients with GCS ≤ 8 following Traumatic brain injury were recruited from Acute care /ICU. Patients were randomly assigned to receive standard care (Multimodal stimulation) or SSIMS until discharge or 14 days (whichever was sooner). The primary safety outcome was the number of deaths at 14th day. The primary feasibility outcome was a higher “dose” of stimulation achieved in SSIMS. Secondary safety outcomes included adverse events (including altered vitals and early neurologic deterioration), compliance with physiologic monitoring criteria, after interventions. Secondary feasibility outcomes included “contamination” of standard care. The primary outcome measure for effectiveness was Coma recovery scale -revised.



Results and conclusion:

Mean CRS-R score for control group on admission, 7th day and on discharge were (Mean±SD) 2.28 ± 1.52, 7.28± 3.4, 8.54±6.2, while for Experimental group it showed 2.12±1.2, ±3.4, 8.9±6.9. It signifies that both the groups improved from baseline but slightly higher rate was seen in the experimental group.

Hence, we can conclude the SSIMS is a safe, feasible and effective protocol that may pay way for better outcomes in acute traumatic brain injury.



Unilateral Cerebral Palsy Patients Benefit from Art-Based Play Therapy: A Case Report



Ketaki Naik

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Abstract

Cerebral palsy is the most leading cause of disability in children. Unilateral cerebral palsy is also known as hemiplegic cerebral palsy. Children with unilateral cerebral palsy often have mild to severe upper extremity involvement from infancy. They keep affected extremity in flexion or extension synergy. Flexion synergy is more commonly seen than extensor synergy. The involvement is like shoulder adduction, internal rotation, elbow flexion, limited active wrist extension with forearm pronation with excessive thumb adduction and flexion. These children also suffer from unilateral neglect. The subject included in this study was a 2-year-old, male child who was a premature baby with NICU stay and is diagnosed case of left unilateral cerebral palsy. He had a history of delayed milestone now he is having difficulty using the left upper extremity for functional activities. While playing he used to move his shoulder in adduction, elbow in flexion, forearm in pronation with the wrist in flexion, and finger flexion. The use of right hand was more as compared to the left hand. Art-based play therapy was given and pre and post score of the QUEST test was compared. The conclusion of the study was that the QUEST score showed improvement in upper extremity functions after Art based play therapy treatment. Art therapy is shown to be an efficient treatment. It is renowned as metaphorical process along with non-verbal shown to have positive impact on cognitive distortion and various complex trauma.

Keywords

art-based play therapy, hemiplegic cerebral palsy.



Respiratory Complications Post Spinal Cord Injury- Retrospective Study



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Mitra Shambhovi

ISIC Institute of Rehabilitation and Sciences, India

Abstract

Introduction: With an incident of 36 percent to 83 percent, respiratory complications are the most common cause of morbidity and mortality in acute spinal cord injury (SCI). Pulmonary dysfunction is the cause of death in 80% of individuals hospitalised with cervical SCI, with pneumonia accounting for 50% of deaths.

The amount of respiratory difficulties experienced during an acute hospital stay has a considerable impact on mortality, length of stay in hospital and cost of treatment.

Material & Method: Electronic data from medical record department was searched & patients were included as per inclusion & exclusion criteria from year 2010 to 2017. The records were checked for details of date of admission, date of intubation, respiratory complications, stay in hospital etc. And recorded data was analysed.

Results: Total 520 patients were admitted during the year 2010 to 2017. Respiratory complications occurred in 34% of patients which were more commonly seen immediately after the injury during the acute hospital stay.

Conclusion: Respiratory complications are foreseen during acute hospital stay immediately after the injury and a comprehensive medical and rehabilitation program is required to reduce the morbidity and mortality.

Biography

Chhabra HS, Sharawat R, Vishwakarma G. In-hospital mortality in people with complete acute traumatic spinal cord injury at a tertiary care center in India—a retrospective analysis. *Spinal Cord* [Internet]. 2021;(June):1–6.

Sengupta D, Bindra A, Kumar N, Goyal K, Singh PK, Chaturvedi A, et al. Respiratory morbidity and mortality of traumatic cervical spinal injury at a level I trauma center in India. *Spinal Cord Ser Cases* [Internet]. 2021;7(1).



Effect of Matrix Rhythm Therapy Integrated with Electrical Stimulation in Sub Acute Bell's palsy. A Case Report



Shweta Ghodke

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Abstract

Bell's palsy is an idiopathic condition caused by dysfunction in cranial nerve VII also known as facial nerve leading to unilateral lower motor paralysis of facial muscles. Many studies were published which showed conventional and recent advance treatment protocols for acute bell's palsy as compared to sub-acute bell's palsy. As, there was dearth in the literature for Matrix rhythm therapy in sub-acute Bell's Palsy. The present study aimed to evaluate the effect of matrix rhythm therapy combine with electrical stimulation in sub-acute Bell's palsy using House-Brackmann Scale. Matrix rhythm therapy is a recent advance modality which (MRT) helps to renew more Cellular logistics that is removal of waste products, embellish microcirculation of oxygenated blood, relaxes muscles and amplify the process of regeneration and healing. The intervention was given for 6 days which included patient education, matrix rhythm therapy with neuromuscular electrical stimulation. The study showed reduced scores in House - Brackmann scale indicating faster recovery in sub-acute bell's palsy.

Keywords

Bell's Palsy, Matrix Rhythm Therapy (MRT), Electrical Stimulation, Physical Therapy



The Journey between Alzheimer and Dementia



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Abstract

The poster presentation focused on the importance and implications on aging, brain aging and senile dementia over the last years. Memory loss and other cognitive deficits in the elderly have been considered as the result of the aging process and therefore called as senile dementia, whose prevalence and incidence increases exponentially with population aging. Oxidative stress is a major contributor to several alterations observed in age related conditions and more significantly in brain suggesting a pivotal role in the pathogenesis and progression of one of the dramatic related diseases called as Alzheimer. AD is the most diagnosed type of Dementia a national healthy priority. Dementia is a general term for a decline in mental ability severe enough to interfere with daily life. Alzheimer is the most common cause of dementia and it's a specific disease but dementia is not. Learning about the terms and the difference between them is important and can empower individuals living with Alzheimer (or) another dementia. Dementia is not a normal part of aging, it is caused by damage to brain cells that affects their ability to communicate, which can affect thinking, behavior and feelings. This poster mainly exhibits about the difference between the AD and dementia with its clinical correlation.

Biography

I Ravi Kumar. A, pursuing Master of Physiotherapy (Dept of Geriatrics) student at Meenakshi academy of higher education and research, Chennai, Tamil Nādu. I had done my Under graduate program at same university, currently I have been doing my masters. In 2017 and 2018 I exhibited posters on I mimic my mom – A fetal irradiation techniques and Differential diagnosis and treatment approach on Facial and Bell's palsy.



Lokomat Therapy



Sangeetha Lakshmanan

Meenakshi Academy of Higher Education and Research, India

Abstract

Lokomat therapy is a robotic treadmill gait training system. It is invented by HOCOMA AG, a medical engineering college of Zurich, Switzerland, and introduced first in the UNITED STATES in the year 2001. In manual treadmill training, physiotherapists are exposed to more physical strain & more than one physiotherapist is required for a gait training. And also, the training duration and intensity are limited, sometimes gait patterns are not physiological or reproducible, these all disadvantages are overcome by using LOKOMAT THERAPY. In this, the physiological gait pattern is achieved by ensuring individual adjustable exoskeleton combined with patented dynamic body weight support system. It provides a state-of-art gait rehabilitation where patients are increasingly more informed about what the most effective & efficient therapy is and they use this information to decide where to go for rehabilitation. Recently, this Lokomat therapy is used in post-critical care in COVID-19. Improvement after 6 sessions of robotic gait training, patients walked independently without gait aids. In the case report conducted, robotic gait training is beneficial in pulmonary rehabilitation of a 61-year-old patient with exertional dyspnoea, resting tachycardia with poor endurance and muscular atrophy in lower limbs followed by 30 days isolation in hospital.

Biography

My name is SANGEETHA LAKSHMANAN, doing my post-graduate in orthopedics at MEENAKSHI COLLEGE OF PHYSIOTHERAPY. My topic is to represent about the LOKOMAT THERAPY and their role in gait training and the recent effects of Lokomat therapy in post-covid rehabilitation, the article published by Annals Academy of Medicine, Singapore.



Prevalence and Association of Balance Impairments in patients with Type 2 Diabetes Mellitus without overt Diabetic Peripheral Neuropathy



Ankita Shetty

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Abstract

Type 2 Diabetes Mellitus complications may accelerate the normal rate of ageing in multiple body systems. It implies that even subtle or preclinical declines in peripheral nerve function could result in decline of balance and overall physical performance in adults with T2DM. Hence, this study was conducted to identify the prevalence of subclinical balance impairments in middle-aged diabetes patient and to determine the factors associated with impairments. Total 60 patients between the age of 36 to 56 years, who had diabetes for at least a year or more were recruited. The Berg balance scale and the Time Up and Go test were used to assess balance among the T2DM patient. Data on the patient's perception of balance abilities was obtained using Activity Specific Balance Confidence Questionnaire. The prevalence of higher balance dysfunction among diabetes in their middle age was found to be 13.3%. Factors such as: Age ($p = 0.02$), Fasting blood sugar levels ($p = 0.018$) and Glycated hemoglobin ($p = 0.03$) levels were associated with balance impairment. Hence proactive monitoring for balance assessment in younger adults with type-two diabetes should begin before onset of overt complications in order to set an appropriate intervention and to delay obvious complications.

Biography

I would like to take this opportunity to introduce myself to you. My name is Ankita Shetty, a passionate 2year post graduate student, pursuing specialty in NeuroPhysiotherapy at KLE Institute of Physiotherapy College. Since forever my captivation with the body and understanding its function has fueled my desire to pursue Physiotherapy as profession, which in turn this aspiration has helped me to complete my bachelor's degree with 72% securing myself in top 3 position across institute. During span of 4 ½ year bachelor course, I have had attended 6 National and International conferences as well as presented 2 posters while attending the same. Furthermore I have appeared for two additional workshops and secured certificate entitled as "Certified Kinesiology Taping Therapist" and "Certified Yoga Instructor". Currently as a post graduate student, have got opportunity to work in 4 research projects, one of which involves development of multisensory tool, undergoing for patency.



Effect of Anxiety on Eye Hand Coordination Using Jenga Game in Physiotherapy Professionals: An Observational Study



Padhiyar Krishma Bhupatsinh

Shree Swaminarayan Physiotherapy College , Ranip, Ahmedabad, India

Dr.Khyati Shah

Shree Swaminarayan Physiotherapy College , Ranip, Ahmedabad, India

Abstract

Background: Amongst the general working population, people were observed to have higher levels of anxiety and performed poorly under the influence of it. It is still a dispute as to how it affects coordination and motor performance. Jenga is a game of physical skill.

Aim: The aim of the study is to improve Eye hand Coordination skills which would help Physiotherapist to work efficiently.

Study type: Observational study.

Method: 65 physiotherapist student within the age group of 18 to 24 years with normal or corrected to normal vision and a score of more than 13 on Hamilton Anxiety Rating scale (HAM-A) are included.

Result: Awaited.

Conclusion: Awaited

Biography

NAME OF THE CANDIDATE :Padhiyar Krishma Bhupatsinh

COURSES OF THE STUDY AND SUBJECT:MASTER OF PHYSIOTHERAPY IN NEUROSCIENCES.

ACCOMPLISHMENTS:

CERTIFICATE IN MUSCLE ENERGY TECHQUIES.

CERTIFICATE IN KINESIOLOGY TAPPING



Perception and Satisfaction towards Telerehabilitation in Patients or Caregivers Undergoing Neurorehabilitation



Thakral KALINDI

MAEER's Physiotherapy College, Talegaon Dabhade, Pune , Maharashtra, India

Chitre PRIYA

MAEER's Physiotherapy College, Talegaon Dabhade, Pune , Maharashtra, India

Ghodey SNEHAL

MAEER's Physiotherapy College, Talegaon Dabhade, Pune , Maharashtra, India

Abstract

In recent years, telemedicine has allowed healthcare professionals to evaluate, diagnose and treat patients in remote locations using telecommunications networks. Telerehabilitation is one such platform which consists of remotely managing rehabilitation using new telecommunication based practices. Telerehabilitation has been employed for treating neurological, cardiorespiratory and musculoskeletal dysfunctions and facilitates access to rehabilitation services, regardless of geographic locations. Telerehabilitation has been useful when reaching a location was not possible. The aim of this survey is to check the perception and satisfaction of patients who underwent neurorehabilitation during the pandemic via telerehabilitation. The secondary objective of the study was to assess whether there was any difference in perception between adult patients and caregivers of pediatric patients. A cross sectional study is being conducted on 27 neurological patients including adults and care givers of pediatric population who have undergone telerehabilitation and a self-made questionnaire will be distributed which is validated by peer review for content validity. . Those who have undergone telerehabilitation in past 1 year and were a part of face to face rehabilitation earlier were selected. The questionnaire will be circulated via google forms and the people who cannot fill the forms will be contacted via telephone. For patients who have difficulty in comprehension and speech and for pediatric patients, the caregivers will be required to fill the questionnaire. The designed questionnaire consisted of various domains. All the data will be collected and presented in the form of descriptive statistical analysis. Results are awaited.



Biography

I am Kalindi Thakral, I am an intern at MAEER's physiotherapy college. As a part of my academics I am doing a research project and very keen to learn more. I am a fresher and find myself lucky to have had this opportunity to present my research on such a big platform.



Computed Tomography Volumetry of Pancreas in Type 2 Diabetics



Shirodkar Kavita

Department of Medical Radiology and Imaging Technique, Tutor, MGM school of biomedical sciences
Aurangabad, Maharashtra, India

Abstract

Background: Insulin has a trophic effect on pancreatic acinar tissue. So the pancreas might be expected to atrophy in persons who have diabetes. The study was conducted with a purpose of evaluating pancreas volume in diabetics and to determine the association between the pancreas volume with duration of diabetes, age and Body Mass Index.

Methodology: An observational and cross sectional study was conducted in the department of Radiodiagnosis on a total of 316 patients after clearance from the college ethical committee. The height, weight, age and gender of the subjects were noted. The patient's history for diabetes mellitus was checked. The pancreatic volume, diameters and HU (Hounsfield unit) values were calculated on each slice.

Results: Among 316 patients the mean pancreatic volume measured in diabetic group was $71.15 \pm 11.65 \text{ cm}^3$ and in non diabetic $72.5 \pm 17.96 \text{ cm}^3$. The volume was slightly decreased in diabetic patients. The pancreatic volume was seen to correlate with age and duration of the diabetics. The various dimensions measured also showed difference in diabetics.

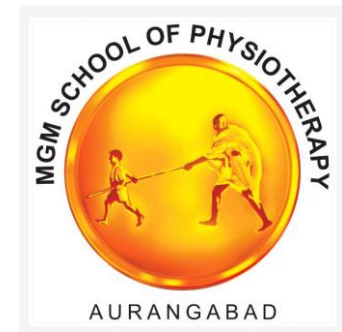
Conclusion: Multi Detector Computed Tomography was useful for volumetric assessment of the pancreas. The pancreatic volume in type 2 diabetics was decreased slightly when compared with non diabetic adults. This study is of great importance as the measurements pancreatic volume will help detect those patients who are at a risk of developing diabetes.

Biography

I am kavita B. Shirodkar I have completed my Msc. In Medical Imaging Technology at NITTE KS Hegde Mangalore and currently working as a tutor at MGM school of biomedical sciences at Aurangabad. I am the course coordinator and conduct lectures for the students. I have attended National CME conducted by KS HEGDE on the occasion of international Day of radiology in association with ISRT held on 10th November 2019. Participated in poster presentation competition on the topic Role of MRI in hamstring injury.



Assessment of Reliability and Validity of Scarf Ratio used in Muscle Tone Evaluation of Preterm Neonates



Dr Pallavi Palaskar

MGM School of Physiotherapy Aurangabad, India

Abstract

Preterm birth halts this development of brain and further development of tone in foetus and leads to hypotonia. Muscle Tone evaluation of preterm neonate is very important to identify the therapeutic needs, any high risk factors for neurological involvement and further treatment progression and rehabilitation of these high risk preterm born neonates. There are various tools available but those are very comprehensive, time consuming and needs training. Scarf ratio is a tool to evaluate tone in upper extremity but its reliability and validity is not proved. Hence, this study had assessed intrarater and interrater reliability of scarf ratio and its correlation with readings of Popliteal angle to find out concurrent validity.

Statistical analysis:- The statistical analysis was done using non-parametric test, Wilcoxon sign rank sum test as the data was not normally distributed. There is no statistically significant difference between two readings ($p = 0.806$) taken at different point of time by the same rater (intrarater reliability). For inter rater reliability the statistical analysis was done using non-parametric test, Man Whitney U test as the data was not normally distributed. There is no statistically significant difference between two readings ($p = 0.99$) taken by different raters at same time. Spearman rank order correlation coefficient test was used for assessing correlation between scarf ratio and popliteal angle. There is highly significant negative correlation between these components. (Correlation-coefficient. -0.811) ($p = 0.000001$).

Conclusion: Scarf ratio can be used as a reliable and valid tool for assessment of muscle tone in preterm neonates along with Popliteal angle

Keywords

Preterm neonates, muscle tone evaluation, scarf ratio, validity



Biography

Dr Pallavi Palaskar, A PhD Scholar in Neurosciences and currently working as an Assistant Professor and Head of Pediatric unit at MGM School of Physiotherapy Aurangabad. I have publication in Scopus and Pub-med indexed journals. I have received a grant of Rs 10 Lac from Govt for medical device innovation. I have completed my MPTh in Neurosciences from KEM. I have more than 10 years of experience in pediatric rehabilitation.



The Impact of Cognitive Rehabilitation on Memory Impairment after HSVE: A Case Report



ASHA HOSPITAL
INSTITUTE OF MEDICAL PSYCHOLOGY,
COUNSELLING & PSYCHOTHERAPY



Dr Tahseen Ara Azad

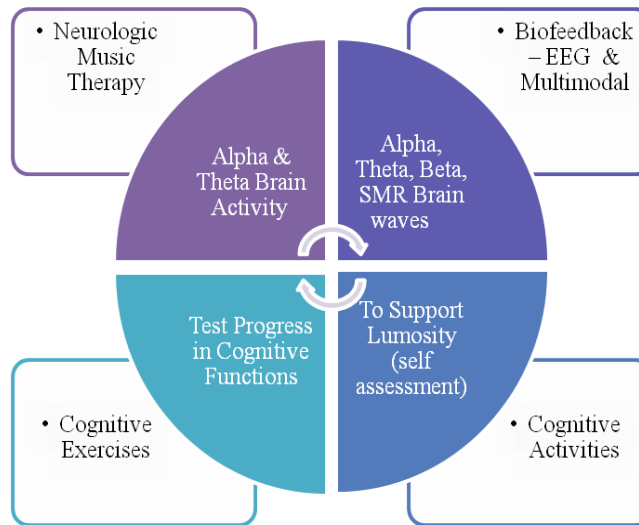
Asha Hospital, India

Abstract

Memory rehabilitation, a part of cognitive rehabilitation, is a therapeutic activity that may play a role in the recovery of memory functions, or in enabling the individual to adapt to the problems. Memory rehabilitation is a standard part of rehabilitation in many settings. Cognitive rehabilitation is the process of relearning cognitive skills. Several studies have suggested damage to the central nervous system caused by herpes simplex virus (HSV) progress to cognitive impairment, specifically, recent and remote memory loss. Although antiviral therapy is an optimal treatment against HSV Encephalitis (HSVE), almost 88% of HSVE patients show a cognitive decline at the initial stages of acute infection. The decrease in cognitive performance on neuropsychological evaluation demands care for the patient beyond the hospital ward. This report is a case report of a 44-years old male with post-herpes sequelae memory loss on cognitive rehabilitation therapy for 30 days of consecutive treatment along with pharmacotherapy. Overall, findings suggest 43.6% of recovery within one month of cognitive rehabilitative therapy.

Keywords

viral encephalitis, memory loss, biofeedback, rehabilitation



Biography

Tahseen Ara Azad, a medical graduate from Bhaskar Medical College (India) and a master's degree in Clinical Cognitive Neuroscience from the University of Sheffield Hallam (United Kingdom). She has recently passed Basic Course of Sleep Medicine, also has two years of post-MBBS experience in well-known multi-speciality hospitals (i.e., Yashoda Hospital, Omega Oncology Hospital, Virinchi Hospital) and also works in a charity clinic. Currently, working as a Neuromodulation Therapist in Asha Hospital located in Hyderabad. She is calm, confident, result oriented and hardworking. Always willing to learn, gather knowledge and utilize it to the best which helps her to perform well under any circumstances to develop both her technical and interpersonal skills. Capable to read, write and speak multiple languages – Urdu, Hindi, English, Telugu and Arabic. Have an excellent verbal and written communication skill which boosts her ability to handle stressful situations. She considers herself a punctual, disciplined, patient, polite and good listener.



Significant Reversal of Presenting Symptoms, Return of Function, Stability and Walking through Neurophysics Therapy in the Treatment of Hereditary Spastic Paraplegia

Kam Wilkinson

Ken Ware NeuroPhysics Therapy Practitioner, Ballina, New South Wales

Abstract

Across many disciplines, enormous funding, research projects, medications and very invasive treatments have evolved with the intent to enhance the quality of life of patients with Hereditary Spastic Paraplegic (HSP). To date, there have been no significant breakthroughs in the treatment of HSP. Often the applied ideologies and methodologies have very mechanical measures, and a cause-and-effect linear focus is often applied towards improving the functions of these patients.

In this case study presentation, I introduce a 49-year-old female patient who was diagnosed with HSP in 2004. She was told by her medical she would need to rely on a wheelchair for transport in 2019. At the time of meeting this patient she was reliant on a walking stick and a wheeled walker to move around.

During the last 17 years post diagnosis her health had deteriorated immensely. She had undertaken a range of physical therapies, medications and mindful practices that has been suggested to her. In October 2021 this patient engaged in 4 weeks of NeuroPhysics Therapy (NPT). Utilizing the NeuroPhysics Therapies complex adaptive system approach to rehabilitative therapy, the patient during these 4 weeks achieved what is deemed medically impossible to be accomplished with HSP. Within the first few days of NeuroPhysics Therapy (NPT) the patient acquired measurable returns in limb function, hamstring, and feet sensations. She was no longer having spasms and she was walking unassisted and balancing without support. The patient is now able to walk unsupported without aid on the beach and walk around her local neighbourhood. She now experiences greater levels of sensation and activation emerging through regions of the system that she had not experienced since her diagnosis and what is commonly associated to HSP.

This presentation will be supported with pre-NPT recordings and post NPT recordings and highlight the sensitive protocols and rationale that are required to be applied for any significantly lesioned system to increase in complexity and rapidly improve in functionality and performance when given the right conditions, highlighting the importance of understanding and exploiting complexity and the role chaos plays within our systems in significantly restoring function and stability of the central nervous system.

Key Words

Hereditary Spastic Paraplegic, Chaos Theory, Complexity Theory, Complex Adaptive Systems, Rehabilitative Therapies, NeuroPhysics Therapy and Non-Linear.



Biography

Kam Wilkinson is a key member of the NeuroPhysics Therapy organisation and currently practicing as a NeuroPhysics Therapist. He is an assistant Ken Ware NeuroPhysics Therapy Institute researcher in Ballina, New South Wales.

Practicing as a NeuroPhysics Therapist and researcher Kam has worked with a large number of patients with very complex spinal cord injuries and neurological disorders. He has successfully been able to improve functionality for these patients, despite their often-grim prognosis in very small-time scales in situations where all other medical and non-medical interventions have failed. He is involved in the ongoing research of complex spinal cord injuries and chronic neurological conditions and is the Educational Coordinator for Neurotricial Sciences.



Correlation of Smartphone Use Addiction with Text Neck Syndrome in High School Going Children Observational Study



Dr. Nensi Gandhi

Parul University, India

Abstract

Background:Our aim is to assess the correlation of smartphone use addiction with Text neck syndrome in high school going children in Vadodara.

Methods:A total 300 high school going children in Vadodara were asked to fill a questionnaires of Smartphone Addiction Scale(SAS) and Neck Disability Index(NDI) attached. Spearman correlation coefficient was used to correlate between the SAS and NDI respectively.

Results:In this study, males were more involve compare to females (males-142, females-158). Mean±SD of SAS and NDI was 140.13±14.319 and 36.73±17.489 respectively. Spearman correlation coefficient showed a significant moderate positive correlation between SAS and NDI ($r=.201^*$, $p<0.001$).

Conclusion:A total 300 participants were selected for the study from high schools. The two scales SAS and NDI are use in this study. By this study we concluded that SAS is strongly correlated withNDI.



Effectiveness of Parent Delivered Early Movement Experience on Motor Skill Development in Preterm Low Birth Weight Infants - Experimental Pre Post Study



Dr. Vinuta Deshpande

KAHER/ KAHER Institute of Physiotherapy, Belagavi, India

Abstract

Background: Preterm low birth weight infants are at high risk for motor developmental delay. Early intervention is required to minimize risk & optimize development. Parent delivered early movement experience will encourage self-directed movement which will facilitate motor development.

Objective: To determine the effectiveness of parent delivered early movement experience on motor skill development in preterm low birth weight infants using Peabody developmental motor scales 2nd Edition.

Methods and Material: In a pre-post experimental study 16 participants were recruited. Parent delivered early movement experience was given for 6 weeks.

Statistical analysis used: Paired t-test, Wilcoxon signed rank test, Mann-Whitney u-test, independent t-test, Welch t-test

Results: The result was statistically significant ($p < 0.001$). Significant changes seen in GMQ (gross motor quotient) and FMQ (fine motor quotient) after treatment. Fine motor score during treatment is significantly less for very low birth weight compared to moderate low birth weight.

Conclusions: The present study concludes that EME delivered by the parents at home has a strong influence on motor skill developments. It also provides information to physical therapy professionals involved in multidisciplinary care of high risk infants in lower middle income country that involving parents in early development program can aid in child development.

Keywords

Early Intervention, Early Movement Experience, Preterm, And Low Birth Weight



Prevalence and Awareness Study about Imposter Syndrome among Physiotherapy Students and Professionals: A Cross-Sectional Analysis



Dr. Pooja Kumari Mahaseth

Assistant Professor, Department Of Neuroscience, MGM School Of Physiotherapy, Aurangabad, Constituent Unit Of MGM Institute Of Health Sciences , India

Abstract

Background: Impostor syndrome describes a feeling of fraud and fails to cherish one's own success. Reported that it is seen among high achieving individuals who, despite their success, fail to acknowledge and have self-doubt persistently. People with impostor syndrome struggle with validating their success to their actual competency. The frequent and persistent thoughts of being anxious, depressed and feeling of being Fraud or exposed over a time will affect mental health greatly. As this continues to grow, eventually the person will lose hope in life and there's a chance of spoiling their career and future.

Objectives: To find out the prevalence and awareness rate of impostor syndrome among physiotherapy students and professionals by identifying and understanding of impostor syndrome and also to find effectiveness of innovative physiotherapy treatment protocols for physiotherapy students and professionals.

Methods: It is a nonexperimental design of observational type. A total of 338 participants were recruited from Nepal, India and Rwanda aged 18 years and above, both male and female who are Undergraduate and postgraduate students, interns, academician, clinicians, researchers are included. The individuals who are not willing to participate are excluded.

Results: The results show the Mean CIPS=31.65 of participants had clinically significant impostor syndrome (total CIPS score ≥ 62 cut off). Out of 338 participants, participants had low (15.38 %), moderate (52.95%), frequent (27.51 %), intense (4.41%) had IS symptoms.

Conclusion: The study concludes that impostor syndrome is prevalent among physiotherapy students and professionals ranging more in professors followed by Postgraduate students then Undergraduate students.

Keywords

BURNOUT, FEAR OF SUCCESS, IMPOSTOR SYNDROME and PHENOMENON, MENTAL HEALTH, PHYSIOTHERAPY, PROFESSIONAL EDUCATION.



Strategies to Build Health Equity in Spinal Cord Injury Patients



Dr. Gitanjali Sikka

M.P.Th (Cardiopulmonary), PhD., Assistant Professor, College of Physiotherapy, Pt.BDS.U.H.S.,Rohtak, India

Abstract

Despite advancements in the healthcare system, there is still lack of thorough rehabilitation care for the patients of spinal cord injury (SCI). Patients with SCI in our country have needs that are not fulfilled due to lack of coordination between primary healthcare and specialty services and hereby they are socially not equitable. There is need to identify barriers and frame strategies unique to SCI patients, which could help these patients to attain a equitable preventive rehabilitation for social upliftment and also for future lifetime. The present paper focuses on evaluating and identifying various healthcare disparities that amplify the insult to the existing anatomical SCI. Various factors include access to treatment, rate of disability, ongoing COVID-19 pandemic, rates of disease, economic constraints, presence of other diseases and quality of life post SCI. These factors need to be addressed for closing the gaps in primary care for individuals with SCI and also for the community base rehabilitation of these patients.

Biography

Awarded UGC Travel Grant Award, 2015 for Paper presentation at California Physical Therapy Association (CPTA) Annual Conference, 2015 on 26th -27th September, Pasadena, Los Angeles, California. PhD (Physiotherapy) form SGT University, Gurugram, University GOLD MEDALIST in MPT (Cardiopulmonary) - FIT Faridabad, M.D.U.,Rohtak(2009) and also University GOLD MEDALIST in BPT- Guru Jambheshwar University of Science and Technology, Hisar (2006). Publications:- Research work on SCI accepted in COCHRANE CENTRAL, 08 international publications and paper/poster presentation in number of national and international conferences.



Early Physiotherapy Rehabilitation of Palatal Palsy in Juvenile Dermatomyositis – A Rare Case



Dr. Namrata Sant

Assistant professor, MGM School of physiotherapy, Aurangabad, MGM Institute of health sciences, Navi Mumbai, Maharashtra, India

Abstract

Background

Juvenile Dermatomyositis with palatal palsy is a rare multisystem autoimmune inflammatory disease, idiopathic in nature, involving children and affecting skin, musculoskeletal system and pharyngeal branch of the X cranial nerve. A study was conducted with 4 year old male child with inability to speak, nasal regurgitation of liquid fluids, progressive muscle weakness in upper and lower limbs associated with swelling around eyes, cheeks, lips and non-healing ulcer in bilateral axilla.

Methodology

Patient with Ryle's tube in-situ was examined in Paediatric Inward Patient Department for Voice, nasal regurgitation, tenderness and muscle strength. Outcome measures were evaluated pre-treatment as Reflux Symptom Index (RSI), Paediatric Voice Handicap Index (pVHI), Visual Analogue Scale (VAS) and Manual Muscle Testing (MMT). According to the impairments, Physiotherapy protocol was formulated and delivered for 6 weeks including Oromotor stimulation, Oropharyngeal exercises, Cryotherapy, Pulsed Ultrasonography along with Conventional therapy and Functional Re-education. Post-treatment, Outcome measures were re-assessed.

Results

Pre and post scores were compared which showed improvement in the Voice, decreased episodes of nasal regurgitation, discontinuation of the RT in-situ, decreased tenderness of the muscles and improved muscle strength and functional status of the patient.

Conclusion

Early Physiotherapy Rehabilitation is essential in the management of palatal palsy associated with Juvenile Dermatomyositis.

Keywords

Juvenile Dermatomyositis, Palatal Palsy, Early Rehabilitation, oropharyngeal stimulation, Palatal exercises.



The Emotional Environment of Children and Parents During Pandemic - A Descriptive Study



K. Rama Devi

Alagappa University, India

Abstract

Background: The novel corona virus disease (Covid-19) has spread quickly worldwide with dramatic consequences on our daily lives. Adverse psychosocial consequences of Covid-19 might be particularly severe for children and adolescents, parents of young children who are more prone to the experience of psychosocial stress and who are more dependent on the access to professional psychosocial support. The present survey therefore aimed to explore perceived stress and the emotional responses of children and adolescents as well as adults without mental health complaints during the social restrictions due to the Covid-19 pandemic.

Methods: The survey obtained information about 100 children and adolescent and Parents. The participants were allocated to two groups: children and adolescent without mental health complaints, Parents without mental health complaints. The survey included general questions about socio-demographic characteristics and mental health status, the Coronavirus Health Impact Survey and the Perceived Stress Scale (only data on adults). Wilcoxon signed-rank tests were used for comparing the emotional responses during the Covid-19 pandemic with emotions before the Covid-19 pandemic. Independent sample t-test were used to compare the level of perceived stress between the adult groups during the Covid-19 restrictions.

Results: An increase to the worse during the Covid-19 restrictions was observed for most emotions and worries in both groups.

Discussion: Covid-19-related social restrictions and potential health risks seem to affect emotions and perceived stress in children, adolescents and adults. Especially, Covid-19 seems to be have worsened the mental well-being of children and adolescent and their families, who were mentally healthy before the Covid-19 pandemic.

Biography

Name: K. Rama Devi

Place of birth: 27 November 1978, Vellore, Tamil Nadu.

UG - Bharani Swathi College of Physiotherapy 2002, Chennai, Tamil Nadu

PG – MPT speciality in Cardiovascular and Pulmonary in Vaag Devi College of Physiotherapy 2011, Warangal, Andhra Pradesh.

Phd - 2nd year in Alagappa University, Karaikudi, Tamil Nadu.



WORK EXPERIENCE:

Physiotherapist

- 2 Years in Sivakumar hospital, Vellore and
- 6 Years in Iswarya fertility Centre in Coimbatore.

Associate Professor

- 3 years in PPG College of Physiotherapy, Coimbatore.

Consultant Physiotherapist: Now I am on my own practice as a Consultant Physiotherapist, Coimbatore.

Presented the paper entitled “Misogyny in Cyberspace: An overview of sports women” at Two day National seminar on cyber crimes against women and children – Precautions and Strategies in International Journal of Social Sciences Review, Organized by Bharathiyar University, Coimbatore on March 28th and 29th, 2019.



Effect of Neurobic exercises on cognitive function related to Post –Stroke



Dr. Ketaki Ajit Patani

Dr. APJ Abdul Kalam College of Physiotherapy, Pims(DU), Loni, India

Abstract

Stroke is the most common neurological disorder that represents a major cause of disability. Post-stroke Cognitive impairment after Stroke is common and cause disability. Vascular dementia is most common problem in Post-stroke. Cognitive impairment and Memory loss are common after Stroke. It include problems like planning organizing difficulty in following direction, feeling of slowness or confusion, trouble in concentrating associated with memory, loss of apathy and depression, difficulty in spatial awareness. Neurobic exercises activates new brain circuit and enhance neurotrophin production which strengthens nerve connection and helps nerve cells and synapses to stay stronger. Cognitive therapy exercise leads to improve loss of perceptual attention and decreases loss of reduction in motor control. Neurobics means "Neuro + aerobics = Neurobics." This program for brain with non routine or unexpected experiences using various combination of your physical senses. Objective of this study to find out effect of Neurobic exercises on memory and quality of life in patients with post stroke. The study was conducted Dept. of Medicine who referred patients for Neurophysiotherapy PIMS, LONI, Tal- Rahata, Dist: Ahmednagar. Total 40 patient in between age group 50 to 80 years individual who having Stroke. This Study was performed with Randomized control trial (permuted block randomization). The participants were explained their role in the study and written consent was taken from the patient. The Result of this study MOCA (Montreal cognitive assessment scale) and SIS (stroke impact scale) were explained to patient and the score MOCA and SIS showed significant p value (< 0.005) within the experimental group post Intervention. The P value significance both within and in between group. Statistical analysis done after that it is concluded Neurobic exercise effective to improve cognitive function as well as quality of life.

Biography

Dr. Patani Ketaki Ajit ¹B.P.T., M.P.T. (Neuro), PhD Scholar

Department of Neurophysiotherapy, Associate Professor, Dr. APJAK COPT, PIMS(DU), Loni, INDIA



Prevalance of Stroke and Its Risk Factor in Tongao Village Aurangabad



Apurva Vaidya

MGM School of Physiotherapy, Aurangabad, India

Dr Pooja Motar

MGM School of Physiotherapy, Aurangabad, India

Shweta Ghodke

MGM School of Physiotherapy, Aurangabad, India

Abstract

Introduction: Stroke is one of the leading causes of death and disability in India .it is classically characterized as a neurological deficit attributed to an acute focal injury to the central nervous system. Many urban populations are unaware of the symptoms and risk factors of stroke which lead to increased mortality rate among the people living in urban areas.

Aim of the study: To determine prevalence of stroke and its risk factors in people of Tongao village.

Methodology: 88 participants, both male and female with age 20 to 97 in Tongao village were screened. The outcome measure used was ABCD scale which showed a significant number of participants have score 2 or more and are at risk of having stroke.

Results: The present study showed out of 88 participants 28 people have diabetes and 35 people with high blood pressure. the prevalence of getting stroke was found to be 45.5% with score 1 ,28.4% with score 2 ,3.4 % with score 3.

Conclusion: The present study states that there is a high risk of stroke in people of Tongoa village

Keywords

stroke, prevalence of stroke, risk factors



Exercise Dose on Autonomic Nervous System in Sedentary Adults – A Scoping Review



Yogeshwari R

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Dr.N.Venkatesh

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Dr.Priscilla Johnson

Professor, Sri Ramachandra Institute of higher education and research (DU), India

Yogeshwari R

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Abstract

Autonomic Nervous System (ANS), a part of the peripheral nervous system controls involuntary body functions unconsciously and maintains body homeostasis. Major reasons for early onset of dysautonomia are sedentary behaviour, stress, anxiety and depression. Dysautonomia is diagnosed based on the vagal withdrawal, sympathetic overactivity or imbalance in the sympathovagal systems. ANS dysfunction affects various systems of the body and this appears to have the risk of developing the chronic diseases like cardiovascular diseases, metabolic disorders, impaired blood pressure regulation, dyslipidemia, sweating disturbances, osteoporosis, depression and anxiety. The aim of this article was to present a review of the literature by searching the databases PubMed, MEDLINE, Web of science, scopus, CENTRAL, EMBASE for the publications related to the effects of high intensity exercises, accumulated physical activity including the occupation, recreation, community and lesiour activities on ANS dysfunction, cardio-respiratory fitnessand the health-related quality of life as a preventive measure. Preventing the sedentary behaviour by promoting the physical activity and Exercise training will cause a great change in the healthcare system in preventing the chronic diseases worldwide.



Grin2b-Related Syndrome: A Rare Case Study of a Male Child and Insight into Physiotherapy Treatment



Shrutika Dnyaneshwar Ramekar

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Pooja Kumari Mahaseth

Assistant Professor, MGM School of Physiotherapy, Aurangabad, a constitute unit of MGMIHS, Navi Mumbai, Maharashtra, India

Abstract

Background: GRIN2B gene disorder is purely a neuro-developmental disorder. It has a mild to Bprofound intellectual disability, delayed development of speech along with motor skills. The GRIN2B gene majorly contributes in the normal neuronal development in humans and found in chromosome 12. The syndrome occurs when one of the two copies of the GRIN2B gene loses its normal function and as it plays a very important role in the transmission of signals in the brain.

Objectives: Determine the psychological and neurological problems among GRIN2B-RELATED SYNDROME along with to Determine causes and risk factors of GRIN2B-RELATED SYNDROME. Also, to find effectiveness of innovative physiotherapy treatment protocols for this rare condition. To Support Initiatives in the World aiming at improving Health and Wellbeing of GRIN2B-RELATED SYNDROME patients and Raise awareness of the role of Safety and Health culture and in protecting and enhancing children's physical and psychological development.

Design: Observational study Setting: OPD, Aurangabad Intervention: one time study, Duration 6 weeks. Case presentation: A 7-year-old male was a patient come to physiotherapy department. His family member reported developmental delay along with intellectual disability. He also had difficulty walking, communicating, chewing food, unable to hold his neck, and difficulty in holding objects. He also has a history of tonic clonic seizures once or twice a day. DEXA scan revealed bilateral osteoporosis in the neck of femur. Conclusion: after completion of the study.

Keywords

Developmental delay; Intellectual disability; Neurodevelopment Disorder; physical therapy.



Impact of Maternal Stress on the Motor Functions of Children with Cerebral Palsy



Radhika.C. M

Faculty of Physiotherapy, SRIHER, India

Kasturee Dutta

Faculty of Physiotherapy, SRIHER, India

Rajeswari.M

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Abstract

Background and purpose: Mothers of children with cerebral palsy have showed increased level of stress as compared to mothers of normally developing children. Most of our rehabilitation in cerebral palsy revolves primarily around the child and less importance is given to reducing mental stress of the mothers. Reduced stress level will enhance the active participation of the mother which can have an impact on the motor function of the child. The aim of this study is to reduce the mental stress of the mothers of children with cerebral palsy and analyze the influence it could have on the motor function of the child.

Materials and Method: 24 mother-child pairs were randomly divided into two groups. The mothers of experimental group received parental counseling, parental education and relaxation exercises. The mothers of the control group received parental counseling alone. The children of both the groups underwent regular physiotherapy. Parental stress scale was used to measure maternal stress and the Gross Motor Function Measure (GMFM-88) was used to measure the motor function of the child. The intervention period was for 4 weeks before and after which the stress and motor outcomes were measured.

Result: The mothers of the intervention group showed a decrease in the level of stress after the intervention period, while the control group did not show any change. The mean stress score of the mothers of the experimental group reduced from $47.92 \pm SD 8.11$ to $46.08 \pm SD 8.6$ ($p \leq 0.05$). The children of the experimental group showed more clinically significant improvement in their motor functions than those in the control group.

Conclusion: Reducing the maternal stress through relaxation exercises and parental counseling will allow more active participation of the mother during therapy sessions and can be influential in improving the motor functions of children with cerebral palsy.



Effect of Combination of Surge Faradic Stimulation with Theraband Strengthening Exercises on Scapular Dyskinesia in Congenital Shoulder Dystocia-A Case Study



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Assistant professor at TMV's Lokmanya Tilak college of Physiotherapy, Navi Mumbai, India

Dr Pranjal Grover

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Dr Shweta Phadke

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Abstract

Background- Shoulder dystocia is a rare condition that can sometimes be seen during delivery after the head of the foetus has emerged from the mother's body. Perinatal brachial plexus injury (PBPI) post shoulder dystocia is common which causes excessive shoulder and scapula muscles weakness because of damage to the nerves that link them to the spine. In rare cases, weakness of muscles persists for longer duration which altered scapulohumeral rhythm.

Aim and Objectives -To study effect of combination of surge faradic stimulation with Thera band strengthening exercises on scapular dyskinesia.

Methodology-A 13 years old girl came to physiotherapy OPD with the complaint of weakness and difficulty in lifting right shoulder for overhead activities, she was known case of post shoulder dystocia brachial plexus injury (C5-C-6, incomplete C7). After examination, range of motion and strength were observed reduced in shoulder and scapular muscles. There was also observed altered scapulohumeral rhythm on Lateral Scapular Slide test (LSST). Patient received 45-60 minutes/day,16-weeks surge faradic stimulation (15 min) along with Thera band strengthening exercises for scapular muscles (30 min).

Results-Significant improvement in scapula humeral rhythm noted on Lateral Scapular Slide test (LSST).

Conclusion-Present study concludes that combine approach of surge faradic stimulation with Thera band strengthening exercises provides promising results in long standing muscle weakness and range of motion and thereby effective in improving scapula humeral rhythm in case of scapular dyskinesia in patient with congenital shoulder dystocia.



Effect of Random, Blocked and Mixed practice order on upper extremity motor learning in subjects with Parkinson's Disease



Rangarajan L

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Kini S

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Abstract

Physiotherapy has an important role in reducing functional limitation and promoting activity participation thus improving quality of life in subjects with Parkinson's disease. Random practice order has been shown to improve motor learning in normal individuals and sports players. The purpose of this study is to investigate which practice order is beneficial in a subject with Parkinson's disease. It was a crossover observational study, with a sampling size of 32. The duration of the study was 18 months. Subjects with Parkinson's disease classified according to Hoehn and Yahr stage 1 to 3, Subjects with MoCA score ≥ 26 (normal cognition) were included in this study. Blocked practice order followed by random followed by mixed practice order was given. In between washout period of 1 week was given. Response time during acquisition and retention was assessed. Data were analyzed statistically by using a one-way Analysis of Variance (ANOVA). By using ANOVA, the p-value is less than 0.001 stating that there is a statistical difference between the three groups during the Acquisition as well as Retention phase. By comparing means we can comment that Maximum time difference was seen in Random practice order between the 1st and 10th trial during both acquisition and retention phases followed by Mixed practice order and blocked practice order respectively. We can infer that Upper Extremity motor learning skill was superior with Random practice order followed by Mixed and blocked practice orders respectively in both acquisition and retention phases.

Biography

Miss. Sneha Vishwanath Kini has completed her MPT in Neuro-physiotherapy from Seth G.S. Medical College, Mumbai, and BPT from MAEER's Physiotherapy College, Pune. She is the senior Physiotherapy consultant at 'Saphale Polyclinic and Diagnostic center', Mumbai. She won the



runner-up prize in Scientifica International conference 2014 for her research on 'Prevalence of Shoulder Subluxation in Subjects with Acute Stroke.' She won 1st Prize for her research on 'Effect of bimanual activity on upper extremity function in subjects with hemiplegia.' She has experience in treating various acute and chronic neurological conditions. She has done international certification in CIMT.



Immediate Effects of Quick Seated Trunk Exercises for Improving Sitting Balance and Trunk Control in Children with Cerebral Palsy



Dr Sumitra Sakhawalkar

Associate Professor, Neurophysiotherapy Department Maers Physiotherapy College, Talegaon Dabhade

Abstract

Background and Purpose : Children with CP show a delayed acquisition and dysregulation of voluntary movements, automatic postural responses in both sitting and standing. This hinders their development and weight bearing activities like standing and walking. It is an important measure of physical function that requires adequate postural control to transfer the center of mass over the feet and maintain alignment of the upper and lower body segments. Impairments in muscle function like weakness, spasticity, incoordination, and decreased selective motor control results in various abnormal movement patterns and difficulty maintaining balance during activities like reaching objects, sit-to-stand and walking in children with CP in comparison to normally developing children. Therefore, improvement of sitting balance is important to allow children with CP to interact with the environment in which they live.

Quick seated trunk exercises (QSTE) have shown to improve:

- Sit to Stand activity (temporal parameters)
- Trunk control
- Muscle activation
- The children were then given

With this viewpoint, the purpose of this study was to examine the Immediate effects of a quick-seated trunk movement exercise (STE) on sitting balance and trunk control in children with spastic CP to determine whether it can be used effectively in clinical settings.

Methodology : 18 Diplegic Cp Children Were Included In The Study Based On The Inclusion criteria informed consent was taken from parents .The children were first assessed by using Paediatric Functional Reach Test and Trunk Control Measurement Scale and the study then conducted. Then the children The children were made to sit on stool with feet supported on ground, hip-knee-ankle making 90° angle. No back support was given.The children were made to sit such that their shoulder was aligned at the beginning of the measuring tape (mark 0 cms)Children performed quick seated exercises of anterior posterior movements of the trunk in seated position while maintaining the alignment of the lower limbs They were made to reach as far as they could with arms raised straight forward without lifting their pelvis or taking any arm support. 5 sessions of 10 repetitions were done. Same procedure was repeated for lateral ie both sides. After the session



the children were again assessed using Paediatric Functional Reach Test and Trunk Control Measurement Scale immediately for sitting balance and trunk control.

Results: The data was assessed using paired t test which showed significant improvement in sitting balance and trunk control of the CP children.

Conclusion: This study concludes that quick trunk exercises that were performed in a seated position immediately improved the sitting balance and trunk control parameters in children with spastic CP and thus can be used effectively in clinical settings.



Erigo: A Robotic Tilt Table Is Effective Tool for Early Verticalisation in Acute Stroke



Wanjari Amita

Robotic Neuro-Rehabilitation and Physiotherapy Centre , Head of Dept, Neuron Brain Spine and Critical Centre Nagpur India

Wanjari Ashwin

Robotic Neuro-Rehabilitation and Physiotherapy Centre , Head of Dept, Neuron Brain Spine and Critical Centre Nagpur India

Abstract

Evidence that organized stroke-unit care results in better outcome has led to positive changes in stroke service delivery around the world. It is well accepted that stroke rehabilitation should commence as early as possible. Exactly when early rehabilitation should start is controversial. Aim: Can training on Erigo is effective for early (3-5 days) & safe verticalisation in acute stroke. Method & Design: 200 acute (> 72 hours) stroke patients trained on ERIGO for prospective randomized case control-study. Outcome measures: Vitals monitored before and after intervention. Patients were assessed with NIHSS and Ashworth scale. CT and MRI of brain were also performed. Results: No abrupt changes in vitals were observed during and after training, no orthostatic reactions could be observed. No negative effects of early verticalization on CT and MRI were reported. No patients had secondary complications. Furthermore patients receiving Erigo training showed better recovery in terms of transfer to vertical position. Conclusions: Erigo seems to be a safe and effective procedure for early verticalisation in acute stroke patients.

Biography

Dr Amita Wanjari, M.P.Th in Neurosciences 2009 (MUHS Nashik). In 2009 Joined Dr Pramod Giri Noted Neurosurgeon in central India. Since 2009 worked purely on Neurological conditions. Curently Head of Dept of ROBOTICS NEUROREHABILITATION AND PHYSIOTHERAPY CENTRE IN NEURON HOSPITAL. Neurosugeon Dr C Pakhmode and Dr Giri. Its 150 bedded neurological hospital. Its only robotics centre in central india. We have treated near about 5000 OPD patients since 2019



Intra Rater and Inter Rater Reliability of Brief Bestest in Patients with Chronic Stroke



Dr.Nijal M Parmar

S.S.Agrawal Institute of Physiotherapy and Medical Care Education, Navsari, India

Dr.Rajiv Limbasiya

S.S.Agrawal Institute of Physiotherapy and Medical Care Education, Navsari, India

Abstract

Background: The Brief Balance Evaluation System Test (BEST) is comparatively new clinical balance assessment tool which has been proven effective in balance disorders. However, literature review showed less number of articles to support the use of Brief BEST in patients with chronic stroke. Hence, the present study aimed to determine the intra rater and inter rater reliability of Brief BESTest in patients with chronic stroke.

Method: 50 participants with chronic stroke were recruited in intra rater and inter rater reliability study. For intra rater reliability rater 1 obtained reading on day 1 and day 7 and for inter rater reliability, three raters who were trained in using Brief BESTest, assessed once each on different days. All three raters were blinded to the procedure.

Results: Brief BESTest showed good intra rater and inter rater reliability (ICC=0.948 for inter rater and ICC=0.890 for intra rater reliability). Standard Error of Mean was 0.59 and 0.443 for intra rater & inter rater reliability respectively. Bland Altman plot showed all subjects in limits of mean $\pm 2SD$ and hence no systematic bias.

Conclusion: Based on the results of the present study, it can be concluded that Brief BESTest is very reliable tool to assess balance in patients with chronic stroke in age group between 35 to 65 years.

Keywords

Reliability, Stroke, Balance, Brief BESTest.



Restoration of Neuromuscular function, significant increase in gait speed and symmetry, increased verbal communication, and skilled movements/ gestures via NeuroPhysics Therapy post left middle cerebral artery cerebral vascular accident (MCA CVA) in April 2016

Brodie McJorrow

Ken Ware NeuroPhysics Therapy – Northern Rivers, Australia

Abstract

This case study presentation is a 64-year-old male patient who suffered a Left MCA territory infarct, characterized by functional auditory comprehension at a basic level, with deficits in processing lengthy and or complex information. The patient presented with severe expressive dysphasia and severe verbal dyspraxia and limited function of his right-hand side (RHS) with impaired RHS sensation.

The patient abandoned in-house rehabilitation after 2 months post lesion (20/07/2016). Medical opinion was that that there would be a minimal improvement and not significant enough to change his current lesioned state. Past therapy interventions have not been successful. The patient not achieving any satisfying results led to emotional outbursts and further withdrawal.

During the initial consultation with the patient, he displayed protective posturing with spasticity through the RHS of his body, hypervigilance through the RHS upper trapeze, and adductors. Significant dyssynergia in movement through his RHS, with compromised sensation also on the RHS.

In November 2021 the patient underwent 2 weeks of Intensive NeuroPhysics Therapy (NPT), with a total of 16 hours over two weeks. Significant positive outcomes were accomplished with the patient over the 2 weeks of NPT with the patient displaying measurable returns of strength and function at every level. Psychophysical systems wide transitions such as these in very small-time scales are unprecedented in medical rehabilitation. Within the second day of NPT the patient's right hand could maintain grip strength without letting go of the handles of the exercise machines. He had significantly decreased hypervigilance through his adductors and trapezes pathways when executing the movements.

This presentation will be supported with pre-NPT recordings and post NPT recordings and highlight the sensitive protocols and rationale that are required to be applied for any significantly lesioned system to increase in complexity and rapidly improve in functionality and performance when given the right conditions.

Key Words

Left MCA territory infarct, Dysphasia, Verbal dyspraxia, Dyssynergia, Psychophysical, Complexity, Medical rehabilitation, NeuroPhysics Therapy, Systems wide transitions.

Biography

Brodie McJorrow is an accredited NeuroPhysics Therapy practitioner. He operates out of his shared clinic in Ballina NSW Australia.



Brodie is passionate in helping all clients from all backgrounds, having worked with a variety of clients/patients ranging from sports performance, to more complex conditions such as stroke and cerebral palsy, assisting his client/ patients to acquire remarkable increased performance in short time scales.

Brodie is originally from New Zealand, he played water polo nationally growing up making the under 16 NZ team, moving to Australia 5 years ago as his passion is big wave surfing, he spends most his spare time in the ocean sailing and diving.



Stroke Rehabilitation and fall incidences in rural areas: A Survey



Dr Paras Joshi

PhD Scholar, Saurashtra University & Physiotherapist at PDU Government Hospital Rajkot. Gujarat, India

Dr Dinesh Sorani

Principal, Government Physiotherapy College, Jamnagar. Gujarat India

Abstract

Background and purpose: Stroke is the leading cause of disability morbidity and mortality in the world. Stroke patients suffer from spasticity, balance issues and other higher mental issues. Stroke patients are prone to falls and fall related injuries during their recovery period. Rehabilitation for such patients may be a challenge in country like India due their unawareness about importance of physiotherapy, economical status and unavailability of proper rehabilitation centers. Survey was done for the same.

Method: 352 patients were asked about their rehabilitation and fall incidents during their first 6 months after stroke via telephone interview. Result: 42.61% (150) participants agreed that proper stroke rehabilitation is necessary after the incident of stroke, and only 17.05% (60) participants received the proper rehabilitation. Reasons for not taking rehabilitation were lack of awareness-34.59%, financial problems 41.09%, and unavailability of rehabilitation center 24.32%. Among participants who received rehabilitation only 33.33% received balance training and 8.33% received cognitive training during first 6 months after stroke. 56.25% of participants have used assistive device for ambulation. Among Participants who did not receive rehabilitation (292), fell significantly higher than those who received the rehabilitation (60) during the first 6 months from the onset of stroke. Among all fallers 24.09 % reported serious injuries which required medical attention including fractures.

Conclusion: Stroke Rehabilitation is inadequate in rural areas due to variety of reasons, which may lead to increase in number of falls and fall related injuries. Balance and cognitive therapies are not widely used among stroke survivors.



Biography

I have completed my MPT neuro from RGUHS in 2009. I am currently, pursuing my PhD from Saurashtra University. I believe survey and co-relational study forms the base to generate new insight for experimental comparative studies. My interests are research in stroke cases and their rehabilitation, proactive fall incidence prevention strategies for such patients.



Immediate Effect of Myofascial Release Using Lacrosse Ball versus Cryoball on Pain and Cervical Range of Motion in Chronic Trapezitis-An Experimental Study



Kinjal Vipul Shah

Shree Swaminarayan Physiotherapy College-Ranip, India

Dr. Kamal parvez Zaiwala

Shree Swaminarayan Physiotherapy College-Ranip, India

Abstract

Background: Trapezitis is an inflammatory pain causing a severe neck spasm, which may cause restricted ROM. Application of MFR is one of many ways to reduce Pain and improve Cervical ROM in Trapezitis.

Purpose: To examine immediate effect of MFR using Lacrosse ball versus Cryoball on Pain and Cervical ROM in individuals with Chronic Trapezitis.

Study Type: Experimental study.

Participants: 20 individuals exhibiting Chronic Trapezitis; 10 individuals in each group.

Methodology: After assessing individuals with Chronic Trapezitis for inclusion and exclusion criteria and signing of written informed consent, Pain was assessed by using NPRS and Pressure Algometer and Affected side Cervical side flexion and rotation ROM was assessed using Universal Goniometer. Maximum tolerable pressure for 120 seconds was applied throughout the length of trapezius with Lacrosse ball in Group-A and same with Cryoball in Group-B, followed by 30 seconds of rest. This was repeated thrice. Pain and Affected side Cervical side flexion ROM was assessed post maneuver.

Result: Awaited.

Conclusion: Awaited.

Keywords

MFR, Lacrosse ball, Cryoball, Trapezitis.

Shortforms Used: ROM=Range of Motion, MFR=Myofascial Release, NPRS= Numerical Pain Rating Scale.



Biography

Name of the candidate: Kinjal Vipul Shah.

Course of study and Subject: Masters of Physiotherapy in Musculoskeletal (Orthopedic) Science

Accomplishments/ Certifications:

1. Certificate in Musculofascial Release Therapy.
2. Certificate in Basic Life Support (BLS) Training.
3. Certificate in Spinal Assessment and Radiology Workshop.

Certificate in Taping Technique



Effect of Long-Term Use of Various Foot Wear On Navicular Drop Test in Young Adults”-An Observational Study



Patel Khushali Nareshbha

MPT Student, Shree Swaminarayan Physiotherapy College, Ahmedabad, India

Dr. Edrish Contractor

Incharge Principal & Sr. Lecturer, Shree Swaminarayan Physiotherapy College, Ahmedabad, India

Abstract

Background: As bipeds, humans have evolved dramatically different feet from other primates, one of the human foot is the longitudinal arch. Longitudinal arch stiffens the foot under loading, enabling it to function as a propulsive level during walking and running.

Aim: The aim of this study is to assess the Effect of Long-term use of various foot wear on navicular drop test in young adults.

Study Type: Observational study.

Participants: Total 60 individuals between 20 to 30 years of age; 20 individuals in each group.

Method: Participants long term walking barefoot, wearing sandals & shoes will be included in the study than their navicular drop test will be calculated.

Then by knowing result of navicular drop test, prevalence of navicular drop in the participants will be calculated/known.

Results: Awaited

Conclusion: Awaited

Keywords

barefoot, sandals, shoes, navicular drop test.

Biography

Name of the candidate: Patel Khushali Nareshbhai

Course of the Study & Subject: Master of Physiotherapy in Musculoskeletal (Orthopaedic) Science

Accomplishments / Certification:

Certificate in Musculofascial Release Therapy

Certificate in dry needling

Certificate in kinesio taping



Effect Of Low- Level Laser Therapy (Lllt) At 635nm On Chronic Trapezitis - An Experimental Study



Galiya Riddhi Sanjaykumar

Shree Swaminarayan Physiotherapy College, Ranip, Ahmedabad, India

Dr. Khyati Shah

Shree Swaminarayan Physiotherapy College, Ranip, Ahmedabad, India

Abstract

Background: Trapezitis is defined as an inflammation of trapezius muscle. Studies suggest high prevalence of trapezitis among young adults. Low-Level Laser Therapy (LLLT) is a non-invasive light source treatment that generates a different wavelength of light which emits no heat, sound or vibration. LLLT is used by physiotherapists to treat various musculoskeletal conditions.

Aim: The aim of the study is to examine the effect of low level laser therapy (LLLT) in chronic trapezitis.

Method: 50 individuals exhibiting chronic trapezitis between 18-30 years of age will be included in this study. Individuals will be divided into experimental and control group. LLLT will be given only to the experimental group; while conventional exercises will be given to both the groups. Treatment will be given 5 times a week for 3 weeks. Patients will be examined at baseline and at the end of 3 weeks. The Numeric Pain Rating Scale (NPRS), Pain Pressure Threshold and Universal Goniometer will be used to measure intensity of pain, sensitivity of pain and affected side Cervical side flexion and rotation ROM, respectively

Result: Awaited

Conclusion: Awaited

Keywords

Low Level Laser Therapy (LLLT), chronic trapezitis

Biography

Name of the candidate: Galiya Riddhi Sanjaykumar

Course of the Study & Subject: Master of Physiotherapy in Neurosciences

Accomplishments / Certification:

Certificate in Myofascial Release Therapy



Effect of Body Position on Manual Dexterity, Grip Strength and Pinch Strength in Physiotherapists



Akshata Manjrekar

KLE Institute of Physiotherapy, India

Abstract

Manual dexterity, grip strength and pinch strength are some of the essential components of hand function which are important for physiotherapists to carry out evaluation and treatment of the patients. Physiotherapists adopt various body positions while working which may have an effect on the hand functions and thus making it necessary to find the effect of the same to improve their work efficiency. In this observational study, 35 physiotherapists within age of 23 - 40 years with minimum 1 year of experience were enrolled. Their manual dexterity was tested by Purdue Pegboard Test and their grip strength and pinch strengths were measured by Jamar dynamometer and pinch gauge respectively in walk standing, stride standing, standing waist bent and sitting erect positions. Data that was analysed showed that Sitting position is optimal for grip strength while sitting and walk standing positions showed best results for lateral pinches and hand dexterity showed the best results in sitting and stride standing positions.

Biography

I would like to take this opportunity to introduce myself. I'm Akshata Manjrekar a second year post graduate student pursuing Neurophysiotherapy as my speciality at KLE Institute Of Physiotherapy. I have also secured certificate entitled " Certified Kinesiology Taping Therapist". I have also previously presented a paper in MUHS CONFERENCE in the year 2020.



Comparing the Effect of Rhythmic Stabilization and Combination of Isotonic Technique on Grip Strength, Pinch Strength and Dexterity of Hand among Middle Aged Healthy Individuals -A Randomized Clinical Trial



Apoorva Dattatray Nale

KLE Institute of Physiotherapy, Belgavi, India

Abstract

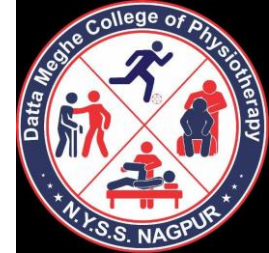
As the age increases, physiological changes like decrease in muscle mass and bone mass takes place. These changes reduces the grip strength, thereby affecting dexterity. The aim of the study was to evaluate and compare the effect of Rhythmic Stabilization(RS) and Combination of isotonic technique(COI) on grip strength, pinch strength and dexterity of hand among middle aged healthy individuals. Forty middle aged healthy individuals were selected on the basis of inclusion and exclusion criteria. Participants were randomly allocated to two groups, 20 in group A(Rhythmic Stabilization) and 20 participants in group B (Combination of Isotonic technique), treatment was given for 4 weeks, thrice a week. Grip strength, pinch strength and dexterity were assessed by Jamar hand dynamometer, Pinch gauge and Perdue peg board respectively at baseline and after 4 weeks of treatment. Outcome measures were assessed at baseline and after 4 weeks of treatment. Notably, Group A participants showed a significant improvement in all outcome measures than Group B ($p<0.05$) when compared. Both the interventions were effective for dexterity outcome in both groups ($p<0.05$). This study provides evidence that application of RS improves grip strength and pinch strength. This suggests that static Proprioceptive Neuromuscular Facilitation (PNF) exercises when applied on fingers are effective to improve dexterity, grip strength and pinch strength in middle aged population.

Biography

I would like to take this opportunity to introduce myself to you as Ms. Apoorva Nale. I have earned the degree of Bachelors in Physiotherapy with 1st class from Dr. D.Y Patil College of Physiotherapy, Pune; currently I am pursuing my Masters degree in Neuro-Physiotherapy at KLE Institute of Physiotherapy. I also gained a good amount of applied knowledge by doing certificate courses like – Certificate Course in Orthopedic Manual Therapy, Therapeutic Taping, Musculofascial Release Therapy, Basic Life Support Provider, by American Heart Association, Physical Assessment & Exercise Prescription in Pediatric Clients. During internship I have developed a taping technique which is under copyright procedure. Currently, I am working on 4 research projects, two of which involves development of scale and a multisensory tool, undergoing for copyright and patency respectively.



Knee Osteoarthritis: Pathophysiology and Physiotherapy Management



Chanchala Shivshankar Mujbaile

Final year, B.P.Th, Datta Meghe College Of Physiotherapy, Nagpur, India

Abstract

Osteoarthritis in present situation is the commonly affecting chronic joint disease. From years there are numerous researches carried out to completely recognize the precise history and pathophysiology of knee osteoarthritis. Despite range is observe there are marked controversy over the topic. This miscellaneous condition is caused due to either local, systemic or any form of outside trauma and as regards to situation the treatment protocol varies from affected person to person. In physiotherapy there are numerous forms of remedy protocol which are still been studied and some are implied over the affected person. Greater new researches are still getting evolved to study the pathophysiology of the osteoarthritis of knee . This review article aims on the current scenerio and what is the pathophysiology of osteoarthritis of knee.

Keywords

Knee Osteoarthritis, Cartilage degeneration, Inflammation



Sports-Related Concussion Knowledge AMONG Physiotherapist – A Cross Sectional Survey



Hardik Ashwinbhai Ramani

student (MPT Sports Science), Govt. Physiotherapy College, and Govt. spine institute Ahmedabad, India

Dr. Manmitkaur A. Gill

MPT (Orthopedics) Sr. Lecturer, GPC, Ahmedabad, India

Abstract

Introduction: Sports-related concussions (SRCs) are traumatic events that affect up to 3.8 million athletes per year. The initial diagnosis and management is often instituted on the field of play by team physiotherapist. Sports-related concussions have been classified as a subtype of mild TBI. Concussions occur from an external force or blow to the head or body that causes an alteration in neurologic functioning, with impairment in concentration, working memory, and executive functioning. Additional problems that can occur include headaches, insomnia, emotional lability, dizziness, and fatigue. After a concussion, an athlete should only return to sports with the approval and under the supervision of their physiotherapist.

Purpose of the Study: To investigate the sports-related concussion knowledge among physiotherapist.

Methodology:

Study duration: 20 days, Study design: cross sectional study, Sample size: 117, Study population: physiotherapist, Sampling technique: conventional sampling

Procedure: The study was done using google form of sports-related concussion knowledge questionnaire containing 10 items which was sent via social media platforms and mail to physiotherapist across Gujrat. Data was collected after taking informed consent. Data analysis was done using appropriate tests.

Results and Conclusion: After collecting data and undergoing suitable analysis 62% physiotherapist are well aware and possess good knowledge regarding sports-related concussion. Although 38% are aware of sports-related concussion but not well aware regarding assessment, management and prevention of sports-related concussion. Hence there is a need of well-structured educational awareness programme within physiotherapy community.

Keywords

Sports-related concussion, physiotherapist, knowledge.



To Assess the Effectiveness of Myofascial Release on Patients with Nonspecific Neck Condition

Bulbul Bhajikhaye

University and organization -Datta Meghe College of Physiotherapy (MUHS), India

Abstract

Neck pain is common among adults, affecting 14-71% of adult's age group of 22-25 years at some point in their life, which causes considerable personal discomfort due to pain, disability, impaired quality of life, and may affect work. The potential causes of neck pain may vary from tumors, trauma (e.g. Fractures, whiplash), infection, inflammatory disorders (e.g. Rheumatoid arthritis) and congenital disorders.) The pain may arise from any of the structures in the neck which includes the intervertebral discs, ligaments, muscles, facet joints, dura and nerve roots. Pain is an "unpleasant sensory and emotional experience associated with actual or potential tissue damage". Neck pain refers to pain/discomfort experienced with or without stiffness in the region between the back of the head and the shoulders. Episodes of neck pain usually referred to as nonspecific, sometimes called 'simple' or 'mechanical' neck pain, resulting from postural and mechanical causes. To capture data regarding a patient's perceived level of disability and the impact of disease on daily activities, pain is the Neck Disability Index (NDI).

The NDI contains 10 items, seven related to activities of daily living, two related to pain, and one item related to concentration. Each item is scored from 0 to 5 and the total score is expressed as a percentage, with higher scores corresponding to greater disability. The NDI has shown to be reliable and valid for patients with neck pain. One area that has received little scientific emphasis is the trigger point. Results from the overloading and injury of muscle tissues, leading to involuntary shortening of muscle fibres.

This could be either active or passive trigger points. All muscles are enveloped by and ingrained with fascia, myofascial release is the term that has been given to the technique that are used to relieve soft tissues from the abnormal grip of tight fascia ("myo means muscle").

In the cervical spine, the muscles most often implicated in myofascial pain are the trapezius, levator scapulae, rhomboids, supraspinatus, and infraspinatus. There is generally a tight band of muscle that can be palpated, and these palpable masses are often referred to as "trigger points". These bands are very sensitive to pressure, and patients will feel a sharp pain when you apply pressure on the exact point. Myofascial release techniques are used to help alleviate musculoskeletal pain. Fascial techniques aim to release fascial tensions, decrease pain and restore function myofascial release techniques are used to help alleviate musculoskeletal pain.

Myofascial release techniques are often used often in clinical settings to treat myofascial dysfunction, but virtually there are only limited scientific experimental evidence exists to support claims of its clinical effectiveness. So the aim and need is to document the effects of myofascial release techniques in non-specific neck pain subjects.

Following the method to conduct the research, patients fulfilling the inclusion criteria were selected and were informed about the procedure. Grouping of subjects were done divided into two groups



where group 1 will receive myofascial release and group 2 will be getting the stretching and isometric exercises

Pre and post interventions will be taken

- 1) cervical ROM (goniometry measurements)
- 2) Pain on VAS
- 3) Pressure threshold by algometer
- 4) Neck disability

Treatment will be given for 1 week and result will be then calculated.



Alterations on Posture, Physical activity and Quality of Life of Students from School to Home- A Cross sectional study



Ekta Kharde

MGM School of physiotherapy, Aurangabad, India

Dr. Satyam Bhodaji

MGM School of physiotherapy, Aurangabad, India

Abstract

Aim - Quality of life, posture, and physical activity affect students during online lectures from school to home, creates musculoskeletal pain and a decline in concentration affecting learning skills.

Methods- 478 students completed validated impression of student's posture, physical activity and quality of life - a response on online lectures Questionnaire assessing QOL, physical activity and postural alterations was used.

Result- Low QOL, hampered communication with teachers and batch mates, deterioration in learning habits, physical inactivity, and poor postural adaptation were found as four different clusters. The disparities between offline and online lectures were significant ($P < 0.0001$) affecting students from school to home.

Conclusion - The concept of life quality in Indian students is multidimensional. Despite the fact that physical and postural functions are frequently intertwined, different dimensions play distinct but unique roles. Physical functioning, in particular, may be linked not only to posture and health status but also to the quality of living especially when self-awareness is lacking. It is important to pay specific attention to the physical activity, postural adaptations and level of concentration during learning.



Comparative Effects of Callisthenic Exercises and Motor Control Exercises in Individuals with Asymptomatic Forward Head Posture on Craniovertebral Angle and Postural Stability: A Randomized Clinical Trial



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Gurudut Peeyoosha

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Abstract

Forward head posture (FHP) has become a very common adaptive postural malalignment due to increase in working and leisure habits that include protracted position of the head. Degenerative changes in the cervical spine start in the early 20's and are seen even in asymptomatic individuals. FHP leads to muscle imbalance and postural instability that further increases the stress on these joints and can advance the progression of cervical disorders. Therefore correction of FHP is necessary. Callisthenic exercises (CE) and Motor control exercises (MCE) are considered to improve muscle imbalance, thereby correcting posture. Therefore, the purpose of this study was to determine and compare the effect of CE and MCE in individuals with FHP. This Randomized clinical trial recruited 30 individuals aged between 18- 40 years with asymptomatic FHP. Participants were allocated into two groups with a ratio of 1:1 using random allocation with chit method. Group A and B received CE and MCE respectively for 3 days a week for 4 weeks. The outcome measures were craniovertebral angle, postural stability and craniocervical flexion endurance using MB ruler software, posturography system TETRAX and pressure biofeedback unit respectively. Outcomes were taken pre intervention and after 4 weeks. Results and conclusion are awaited.

Biography

Name: Rutuja A. Phadke

Currently doing Masters in Orthopedic Physiotherapy in KAHER Institute of Physiotherapy.

BPT completed in the year 2019 from KAHER Institute of Physiotherapy.

Certified in Soft tissue techniques including MFR, IASTM, Dry Needling, Matrix Rhythm Therapy and COMT



Comparative Effect of Stabilization Sensorimotor Exercise And Virtual Reality on Pain, Range of Motion, Function, and Postural Sway in Non-Specific Neck Pain - A Randomized Parallel Group Study



Kembhavimath Shruti

Department of Orthopedic physiotherapy, KAHER Institute, Belagavi, India

Welling Aarti

Department of Orthopedic physiotherapy, KAHER Institute, Belagavi, India

Abstract

Chronic neck pain is a common complaint in adult and a major health burden. Impaired cervical joint position sense and balance are associated with neck pain. Specific therapeutic exercise are effective for improving neck pain and functional ability but their effects on joint position sense and balance impairments remain uncertain. Stabilization Sensorimotor exercise (SSE) have significant effects on neck pain in terms of pain, impaired cervical joint position sense and proprioception. Virtual reality (VR) has been proven to reduce effect pain, impairments in cervical kinematics, increasing neck ROM. The purpose of this study was to determine the comparative effect of SSE and VR in individuals with non-specific neck pain. Aim of this study is to determine the comparative effect of stabilization sensorimotor exercise and virtual reality on pain, Range of motion, Function, and postural sway in non-specific neck pain – A randomized parallel group study. This randomized parallel group study was conducted among 30 individuals aged between 20-40 years with NSNP. Pre and post assessment of participants was based on VAS, ROM, NDI, posturography system tetrax. Group A (SSE+conventional) and B (VR+Conventional) will be given SSE and VR. The therapy was given for 5 days a week for 2 weeks. Results and conclusion are awaited.

Biography

I Shruti kembhavimath presently pursuing Final year of Masters in orthopedic Physiotherapy from KAHER Institute of Physiotherapy. I completed my undergraduate from the same Institution in the year 2020. Musculoskeletal conditions and Advanced Physiotherapy is my area of interest. My way of concept delivery would help me secure my future Aim of Academic practice in field of Physiotherapy.



Comparative Effects of Pilates and Plyometrics in Individuals with Non-Traumatic Shoulder Pain: A Randomized Clinical Trial



Liyonna Helga Sequeira

KAHER Institute of Physiotherapy, Belagavi, Karnataka, India

Abstract

Background: Shoulder pain is a common musculoskeletal condition. Soft tissue pathologies like Rotator cuff tendinopathy/impingement syndrome, adhesive capsulitis, subacromial bursitis, shoulder instability, labral tears lead to shoulder pain. Physiotherapy is often the first line of management for shoulder pain and if left untreated can cause disability and morbidity. Pilates is efficient in relieving pain and improving function and strengthen the core, to increase the efficiency of the extremities with implementation of proper breathing techniques. Plyometrics are exercises that force a rapid lengthening of muscle prior to contraction, to result in increase force output and train the capacity of the shoulder. Hence, the purpose of this study is to compare the effects of Pilates and Plyometrics in individuals with non-traumatic shoulder pain.

Methods: The trial recruited 30 individuals aged 18-60 years experiencing shoulder pain (>3 weeks) were selected and randomly divided into two groups using random allocation with a ratio 1:1. Group A and Group B were given Pilates and Plyometrics respectively for 15 sessions, 5 times a week for 21 days. The outcome measures were done at the baseline and at the end of the treatment sessions, using Visual Analogue Scale(VAS), Goniometer, Isokinetic Dynamometer and Shoulder Pain and Disability Index(SPADI).

Result and Conclusion: Awaiting

Biography

I am Liyonna Helga Sequeira, currently pursuing my Final Year in Master of Physiotherapy in Orthopaedics, in KAHER Institute of Physiotherapy, Belagavi. I've completed my Bachelor of Physiotherapy from Kasturba Medical College, Manipal University, in the year 2020. I am certified in the Certificate Course of Orthopaedic Manual Therapy (COMT) from Capri Institute of Manual Therapy. My field of interest is in Musculoskeletal Conditions and Advanced Physiotherapy.



Myofascial Release with Slider Neural Mobilization in Management of Cervical Radiculopathy Associated with Myofascial Pain Syndrome



Samriti

College of Physiotherapy, Dr D Y Patil Vidyapeeth, Pune, India

Bawa Parul

College of Physiotherapy, Dr D Y Patil Vidyapeeth, Pune, India

Abstract

Cervical Radiculopathy (CR) is a clinical condition described as a disorder of a nerve root that is most commonly caused by some compressive or inflammatory changes occurring from a space-occupying lesion. In addition, patients with CR may also have Myofascial Pain Syndrome. Myofascial trigger points occur commonly in the upper trapezius muscle and are a characteristic clinical feature of CR. This study is aimed to evaluate the benefits of Myofascial Release (MFR) therapy on pain severity in patients with Myofascial Pain Syndrome (MPS) associated with CR. The participants were screened by taking detailed history, physical and neurological assessment. The subjects selected were 20-35 years of age, with CR for 0.5-3.0 years. Recruitment was completed in 2 weeks. At each treatment session, the patient was given thermotherapy and Manual Cervical Traction, followed by MFR and NMT. The Neck Disability Index (NDI), Numeric Pain Rating Scale (NPRS), and Pressure Threshold of Upper Trapezius (PPT) were used as outcome measures. The readings for outcome measures were taken at baseline and post-intervention (2 weeks). After the treatment of 2 weeks, there was a significant improvement in the scores of the NDI and NPRS. On average, there was a difference of 2 kg/m² in the readings of PPT. No adverse side effects were noticed. This study investigated the effect of the MFR technique in addition to conventional therapy on tender points associated with CR on pain and disability. It was found that the use of the MFR technique in addition to the conventional treatment substantially improved patient outcomes.



Qualitative & Quantitative Assessment of Foot and Ankle Complex in Post-Stroke Patients: A Systematic Review



Dr Vijay Kumar

Department of Physiotherapy, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, India

Rutuja Wani

Department of Physiotherapy, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, India

Abstract

Background: FAC impairments are common in post-stroke patients. Alteration in foot posture, sensation, strength, range of motion are the common impairments which compromise flexibility and stability provided by the FAC. Hence, it is needed to consider the FAC in routine examination.

Objective: The aim was to examine various neuro-musculoskeletal components of assessment related to FAC in post stroke patients.

Methods: Systematic search carried out in PubMed, EMBASE, Scopus, Web of Science for observational and cross-sectional studies that examined the FAC in post-stroke patients.

Results: The review incorporated eight studies which included subacute and chronic ambulatory stroke patients. Four studies assessed the foot posture using FPI and concluded 30% stroke patients suffer abnormal, asymmetric foot posture, two studies measured ankle ROM using goniometer and found decrease dorsiflexor strength, four studies assessed spasticity in plantar flexors using MAS. Muscle strength of the affected side was statistically less than that of the unaffected side for both dorsiflexors (0.64) and plantar-flexors (0.74) when measured using dynamometer and one study showed reduced sensation on the plantar aspect of the affected foot, checked by monofilament..

Conclusion: The included studies established supinated/ pronated foot, decrease strength of dorsiflexors, spasticity in plantar flexors, reduced ROM and impaired sensations to be the most common impairments post-stroke.

Keywords

stroke, foot ankle complex

Abbreviation: FAC- Foot Ankle Complex, FPI- Foot Posture Index, ROM- Range of Motion, MAS- Modified Ashworth Scale



Biography

Rutuja Wani, MPT II year- Neurosciences, Department of Physiotherapy, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education.



A Systematic Review of the Effectiveness of Wrist Manipulative Therapy in Patients with Lateral Epicondylitis



Madhura Sohani

Department of physical therapy, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Karnataka, India.

Dr. Charu Eapen

Professor - Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Karnataka, India.

Rachel Rosita

Department of physical therapy, Kasturba Medical College, Mangalore, Manipal Academy of Higher Education, Karnataka, India.

Abstract

Background: Lateral epicondylitis (LE) is a chronic degenerative condition, associated with pain on the lateral epicondyle of the elbow, at the common extensor's origin of the forearm. A variety of physiotherapy treatment have been recommended that are effective for improving function and pain in LE. Recent studies have demonstrated effect of wrist mobilization on LE. Therefore, there is a necessity for an inclusive, review of the current literature to explore the distinct out-turn of wrist joint mobilizations on symptoms related to LE.

Objective: The purpose of this systematic review was to determine if wrist joint mobilization is effective in improving pain, grip strength, ROM and disability in adults with LE.

Method: A comprehensive data search was performed using PubMed, Embase, Web of Science, Cochrane, and PEDro from inception to June 2021 by two reviewers. Full text RCT's published in English, having subjects 18 years and above, diagnosed with LE were included.

Results: We included 4 RCT's with the total of 101 participants of age group 22 to 55 years, symptoms of duration being minimum 6 weeks. 3 out of 4 studies showed significant improvement in pain and other outcome measures.

Conclusion: Wrist mobilization given for three weeks or more for LE had a significant effect on pain but the effect on grip strength was varied.



Biography

Name: Madhura Sohani

Designation: Post graduate student, 2nd year

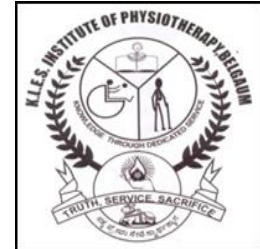
Organization: Kasturba medical college, Manipal academy of higher education, Mangalore, Karnataka.

Course: Masters in Physiotherapy (Musculoskeletal Sciences)

Area of interest: Musculoskeletal Science, Manual Physiotherapy, Sports Physiotherapy



Prevalence of Plantar Fasciitis among Traffic Police in Belagavi City - An Observational Study



Pratiksha Rahane

MPT (Community Physiotherapy and Rehabilitation), KAHER Institute of Physiotherapy, Belagavi, Karnataka, India

Abstract

Background: Plantar fasciitis – a non-inflammatory structural breakdown of the plantar fascia with classic presentation of gradual, insidious onset of inferomedial heel pain, at the insertion of plantar fascia. There is dearth in the literature on disorders in Traffic Police in India, hence this study was undertaken.

Objective: To study the prevalence of Plantar Fasciitis among Traffic Police in Belagavi city.

Material and Method: 102 Traffic Police of the age 25-55 years, having complains of heel pain since 3 months were included in this cross sectional study. They were assessed for Pain & Disability using VAS, Windlass test, Foot Posture Index-6 and ICF Documentation.

Results: Prevalence of Plantar Fasciitis was evident among Traffic police (25%). Prevalence of Plantar fasciitis in Right foot was 73.08 % & in Left foot was 68.27%. Maximum participants reported moderate difficulty in performance of walking long distance, toileting, maintaining a body position, driving, pushing with lower limb.

Conclusion: Prevalence of Plantar fasciitis is more evident in the right foot as compared to the left foot in Traffic Police of Belagavi city. There was significant corelation between the presence of Plantar Fasciitis & the FPI on the Right side. Maximum limitation was noted in walking long distance, toileting, maintaining a body position, driving, pushing with lower limb.

Keywords

Plantar Fasciitis, Traffic Police, Windlass test, Pain, FPI, ICF

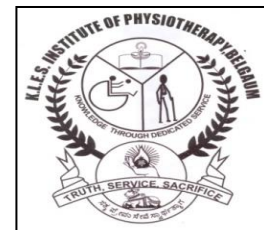
Biography

MPT (Community Physiotherapy and Rehabilitation), KAHER Institute of Physiotherapy, Belagavi, Karnataka, 590010

BPT completed in the year 2020 from Krishna College of Physiotherapy, Karad, Satara, Maharashtra, 415110



Prevalence of Non-Specific Low Back Pain among Auto Rickshaw Drivers in Belagavi City – An Observational Study



Shruti. S. Gachhi

KAHER Institute Of Physiotherapy, Belagavi, India

Abstract

Background: Low back pain (LBP) is a very common health condition and is a major cause of disability. Workload, strenuous posture and stress are the worst probable factors which affect the health of auto rickshaw drivers.

Objective: To determine the prevalence of non-specific LBP in auto rickshaw drivers of Belagavi city.

Methodology: 122 auto rickshaw drivers in the age group of 20-55years working for at least 2 years and have LBP since 6 months were screened using Oswestry Low Back Pain Disability Questionnaire (ODI) and ICF Documentation.

Results: Positive association between age, type of vehicle, and years of driving with ODI scores. 17.21% had mild disability, 68.85% had moderate disability and 13.93% had sever disability on ODI questionnaire. Maximum participants reported moderate difficulty in performance of sitting, bending, maintain a sitting posture, lifting, putting down objects and driving.

Conclusion: The prevalence of non-specific LBP was noted in 68.85% auto rickshaw drivers in Belagavi city. The maximum limitation was noted in sitting, bending, maintain a sitting posture, lifting, putting down objects and driving.

Keywords

Non-specific low back pain, auto rickshaw drivers, ICF, ODI

Biography

I'm Shruti.S.Gachhi Presently pursuing Final year of Masters in Community Physiotherapy and Rehabilitation from KAHER Institute of Physiotherapy. I completed my Undergraduation from the same Institution in the year 2020.



Comparative Effects of Muscle Percussion and IASTM on Hamstring and Thoracolumbar fascia in Individuals with Non-specific Low Back Pain: A Randomized Parallel Group Study



Jaytie Parki

KAHER Institute of Physiotherapy, Belagavi, India

Abstract

Background: Lower Back Pain is one of the leading public health problems that isn't always pathological but mechanical. The fascia surrounds the muscles in the body and its tightness can present as reduced ROM, muscle strength and decreased soft tissue extensibility leading to LBP. To release the myofascial, a variety of tools exists, which aims at manipulating soft tissue by stretching the area of tight fascia gently. Thus, the aim of this study is to determine and compare the effects of percussion gun device and IASTM Technique applications with respect to pain, flexibility and postural sway in LBP.

Methods: 28 participants (aged 18-55) with low back pain were randomized into 2 groups. Group A received percussion gun and Group B received IASTM with Hot Moist Pack and Interferential Therapy to all the participants followed by multi-step core stability exercise program. Pain using visual analog scale, tightness using active knee extension test and sit and reach test, postural sway using TETRAX was assessed pre and post intervention.

Results and Conclusion: Awaiting



Awareness of Text Neck Syndrome and Addiction to Smartphone in Physiotherapy Students of Ahmedabad: An Observational Study



Sharma Neha Narendrabhai

Shree Swaminarayan Physiotherapy College, Ranip, Ahmedabad, India

Dr. Khyati Shah

Maer's Physiotherapy College Talegaon Dabhade Pune Maharashtra India

Abstract

Background: In today's world with the advancement in wireless technologies, people spend enormous time on using hand held devices such as tablets and smart-phone. The users are nowadays to share information, use the internet, watch videos, use social media, gaming, and many other daily activities, which result in prolonged neck flexion with forward bending resulting in "text neck. The person who shows addictive behaviour toward mobile phone is called nomophobia.

Aim: The aim of study is to find awareness of TEXT NECK SYNDROME and addiction to smartphone in PHYSIOTHERAPY students of Ahmedabad.

Method: 85 participants between 18-27 years of age will be included in the study. The questionnaire contained socio-demographic information and questions to assess the awareness of Text neck syndrome. nomophobia questionnaire (NMP-Q) to assess the addiction of smartphone. NMP-Q contains 20 questions and each question scored on 7- point Linkert scale.

Study Type: Observational study

Result: Awaited

Conclusion: Awaited

Keyword

Addiction, Awareness, Smart Phone, Text neck syndrome (TNS)

Biography

Name of the candidate: Sharma Neha Narendrabhai

Course of the Study & Subject: Master of Physiotherapy In Neurosciences

Accomplishments / Certification:

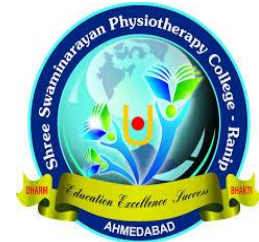
Certificate in primary and advanced Pilates instructor training

Certificate in cardiac and pulmonary rehabilitation

Certificate in basic of PNF approach



To Study the Relationship between Low Back Pain and Sleep Disturbance in Office Workers



Kakkad Khushali Jagdish

Shree Swaminarayan Physiotherapy College – Ranip, India

Dr. Dhara vaghela

Shree Swaminarayan Physiotherapy College – Ranip, India

Abstract

Background: A non specific low back pain is a lumbar pain without a pathological cause and its incidence is highest among low back pains. 60% - 80% of population experience low back pain at least once in their life. Sleep constitute an equally complex and vital biological function, with behaviourally driven goal to maintain homeostasis across multiple physiological system. Sleep is essential for physiologic restoration, learning, memory and cognition. Changes in terms of quality, quantity and sleep pattern causes sleep disturbance, which may lead to decreased work ability, increase sick level and higher energy rate.

Aim: To study the relationship between low back pain and sleep disturbance in office worker.

Methodology: Participants who will meet the inclusion criteria will be included in the study. Informed consent will be taken from participants. Then, low back pain and sleep quality will be checked respectively by Modified Oswestry low back pain disability questionnaire and Pittsburgh sleep quality index scale. At the end relationship of low back pain with sleep disturbance would be checked in this study.

Result: Awaited.

Conclusion: Awaited.

Keywords

Low back pain, sleep disturbance.

Biography

Name of candidate: Khushali Kakkad Jagdish.

Course of study and subject: Master of Physiotherapy in community health and rehabilitation.

Accomplishment/certificate:

Certified in Myofascial Release Technique (advanced soft tissue manipulation) .

Certified in cancer rehabilitation & oncology physiotherapy.

Certified in swiss ball therapy in physiotherapy.



Immediate Effect of Myofascial Release of Erector Spinae on Pain and Flexibility in Non Specific Low Back Pain – An Experimental Study



Patel Mausami Hasmukhbhai

First Year MPT Student, Shree Swaminarayan Physiotherapy College, Ahmedabad, India

Dr. Edrish Contractor

Incharge Principal & Sr. Lecturer, Shree Swaminarayan Physiotherapy College, Ahmedabad, India

Abstract

Background: Myofascial release focuses on reducing pain by easing the tension and tightness in trigger points. Intramuscular pressure of lumbar erector spinae have been found a significantly increased in the lumbar compartment in low back pain.

Aim: The aim of this study is to assess the immediate effect of MFR of erector spinae on pain and flexibility in non specific low back pain

Study Type: Experimental study

Participants: Total 20 individuals between 18 to 34 of Age

Method: The individuals who having acute and subacute non specific low back pain are included in the study according inclusion-exclusion criteria. Consent form will be taken. Their NPRS for pain and test for tightness of erector spinae will be calculated. After giving MFR again check the NPRS and erector spinae tightness test.

Results: Awaited

Conclusion: Awaited

Keywords

MFR, Erector spinae, non specific low back pain

Biography

Name of the candidate: Patel Mausami Hasmukhbhai

Course of the Study & Subject: Master of Physiotherapy in Musculoskeletal (Orthopedics) Science

Accomplishments / Certification:

Certificate in Myofascial Release Therapy, Certificate in Instrument assisted soft tissue mobilization



To Study the Relationship of Sleep Quality and Functional Disability in the Patients with Osteoarthritis of Knee



Raval Mahima Ashokkumar

First Year MPT Student, Shree Swaminarayan Physiotherapy College, Ahmedabad, India

Dr. Edrish Contractor

Maer's Physiotherapy College Talegaon Dabhade Pune Maharashtra India

Dr. Ghodey SNEHAL

Maer's Physiotherapy College Talegaon Dabhade Pune Maharashtra India

Abstract

Background: Osteoarthritis (OA) is the most common type of arthritis and the leading cause of disability that impacts the elderly and middle-aged worldwide. The cause of osteoarthritis is repetitive mechanical loads and aging, decreased strength in the muscle group involving the joints which it causes significant progressive loss of function. Although no study has evaluated sleep disturbances in older adults with painful OA using objective measures, including overnight polysomnography, prior research has shown that self-reported sleep disturbances, including problems with sleep onset, maintenance and early morning awakenings, are commonly reported by people with OA.

Aim: The aim of this study is to assess the relationship of sleep quality and functional disability in the patients with OA knee.

Study Type: Observational Study

Participants: Total 70 individual between 40 to 65 years of age will be taken in this study.

Method: The individuals with the medically diagnosed OA knee joint will be taken in this study. Then the functional disability and sleep quality checked by the respectively modified WOMAC and the Pittsburgh Sleep Quality Index. At the end, the relationship of sleep quality on functional disability would be checked in this study

Results: Awaited

Conclusion: Awaited

Keywords

OA Knee, PSQI, Mod.WOMAC



Biography

NAME OF THE CANDIDATE: Raval Mahima Ashokkumar

COURSE OF THE STUDY & SUBJECT: Master of Physiotherapy in Musculoskeletal Sciences

ACCOMPLISHMENTS/CERTIFICATION: Certified in Myofascial Release Technique (Advanced Soft Tissue Manipulations)



A Study to Assess the Effect of Thoracic Spine Manipulation with Cervical -Scapulothoracic Stabilization Exercise in Mechanical Neck Pain among Dentist



Shruthi. B

Kempegowda Institute of Physiotherapy, Bengaluru, Karnataka, India

Dr. Prashantha. S

Kempegowda Institute of Physiotherapy, Bengaluru, Karnataka, India

Abstract

Mechanical neck pain is a non-specific pain in the area of cervical-thoracic junction which is caused by repeated neck movements and Dentistry is a high-risk profession in terms of neck region musculoskeletal disorder as they have repetitive movement, long term poor work posture. This study aimed to assess the effectiveness of thoracic spine manipulation with cervical-scapulothoracic stabilization exercise in mechanical neck pain among dentist. A sample of 60 subjects with mechanical neck pain was selected for the study. Duration of treatment for thoracic spine manipulation is 2 sessions for 2 weeks and cervical-scapulo thoracic stabilization exercise is 6 sessions for 2 weeks. It was evaluated using visual analogue scale (VAS), neck disability index (NDI), cervical range of motion with goniometer. Following statistical analysis, significant gains were noted in VAS score (6.98 ± 0.96 to 3.05 ± 1.17), NDI score (45.36 ± 7.47 to 17.98 ± 5.04) and cervical range of motion in flexion (49.10 ± 7.99 to 60.76 ± 5.85), extension (42.90 ± 4.32 to 53.48 ± 6.57), right rotation (61.41 ± 6.79 to 70.16 ± 5.70), left rotation (63.58 ± 5.58 to 71.08 ± 4.60), right flexion (36.76 ± 2.21 to 40.66 ± 1.81) and left flexion (36.98 ± 2.28 to 41.18 ± 2.03). hence, thoracic manipulation with cervical-scapulothoracic stabilization exercise is a beneficial approach in treating dentist with mechanical neck pain.

Biography

Shruthi. B, PG student, Kempegowda Institute of Physiotherapy, Bengaluru, Karnataka.

Dr. Prashantha.S, Assistant Professor, Kempegowda Institute of Physiotherapy, Bengaluru, Karnataka.



Intra-Rater Reliability of Dynamic Leap and Balance Test in Normal Adult College Students: An Observational Study



Madhav Babubhai Katara

First Year MPT Student, Shree Swaminarayan Physiotherapy College, Ahmedabad, India

Dr. Manmitkaur A. Gill

(MPT – Orthopedics) Sr. lecturer GPC, Ahmedabad, India

Abstract

Introduction In motor performance balance is main component to stabilize our body. Mainly two type of balance 1) static and 2) dynamic. Static balance is the ability to maintain postural stability and orientation with centre of mass over the base of support and body at rest, Dynamic balance is the ability to maintain postural stability and orientation with centre of mass over the base of support while the body parts are in motion. There is a need for new clinical assessment tools to test dynamic balance. We are using common method to test dynamic balance Y balance test, star excursion test, this test are using unchanged base of support, which test are required body control in unchanged base of support. May not be any assessment tool to measure to changes in base of support.

Aim of the Study: To find out Intra-rater reliability of DLBT for dynamic balance among normal adult college student.

Method: 32 healthy college students are participated in this study. Time Taken to the participants to complete the 20-leap task. Subjects was leaped peripheral to central targets alternating weight bearing from one leg to the other leg. participant back to central target with the tested limb. Participants will be tested by the same investigator on each of the two testing days. The testing sessions will be similar on both the days (day 1 and day 2). Attainment of balance will be assessed using criteria similar to the modified Balance Error Scoring System (BESS) criteria.

Results: A repeated measures two-way mixed ANOVA was used to calculate an Intraclass Correlation Coefficient (ICC) to examine the test-retest reliability of the DLBT. Statistical analysis was performed using SPSS for Windows. An ICC of 0.98 with a 95% confidence interval from 0.98 to 0.99 we found that DLBT for intra-rater reliability (ICC 0.989) had highly significant reliability.

Conclusion: This study indicates that INTRA-RATER reliability of the DLBT is excellent for time, cost effective and easy to use which suggests that clinicians can use this instrument.

Keywords

Dynamic leap and balance, clinical assessment tool, reliability.



Efficacy Of Eccentric Training For Lateral Epicondylitis: A Pilot Study



Govindaswamy Sumedha

KAHER Institute of Physiotherapy, Belagavi, Karnataka, India

Abstract

Lateral epicondylitis (LE) is an overuse injury secondary to an eccentric overload of the common extensor tendon at the origin of the extensor carpi radialis brevis (ECRB) tendon. It results from the repetitive strain caused by activities that involve loaded and repeated gripping and/or wrist extension. Physiotherapy is a form of conservative management which is proven to be effective in treating LE. Single form of eccentric exercises has shown promising results in the management of LE. Aim is to validate the eccentric training protocol in LE. objective is to evaluate the effect of eccentric training in LE in terms of pain, grip strength and pinch strength. All the participants have been screened based on the inclusion and exclusion criteria prior to their recruitment into the study. PRTEEQ, pain pressure algometer, grip strength using hand dynamometer and pinch strength using pinch gauge have been collected. All participants have received 15 sessions of eccentric training protocol that has been designed for this study and in 3 weeks.

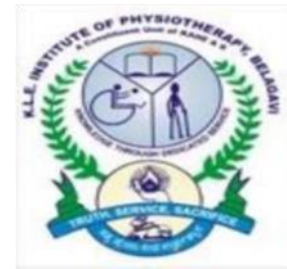
Result Awaiting

Biography

I'm, Govindaswamy Sumedha, currently pursuing my final year in Master's of Physiotherapy in Orthopaedics, in KAHER Institute of Physiotherapy, Belagavi. I've completed my Bachelor's of Physiotherapy from DR. N.T.R UNIVERSITY OF HEALTH SCIENCES in the year 2020. I am certified in Certificate Course of Orthopaedic Manual Therapy (COMT).



**Comparitive Effect of Pilates And Bruegger’s Exercises in
Conjunction with Low Level Laser Therapy for Individuals
with Forward Head Posture Associated Temporomandibular
Joint Dysfunction: A Two Arm Parallel Study**



Malode Gauri

Department of Orthopedic Physiotherapy, Kaher Institute of Physiotherapy, Belagavi, India.

Kage Vijay

Department of Orthopedic Physiotherapy, Kaher Institute of Physiotherapy, Belagavi, India.

Abstract

The temporomandibular joint (TMJ) is one of the most complex and used joints in the human body, with important functions like chewing and Speaking. Evidences suggests relationship between craniomandibular region and forward head posture (FHP). FHP leads to muscle imbalance which further causes malalingment of condylar head and articular disc in TMJ. Available treatment protocols for temporomandibular joint dysfunction (TMJD) help in decreasing musculoskeletal load, reduce pain by decreasing inflammation, but there is very less literature available on treatment of TMJD by using correction of forward head posture. Pilates and Bruegger’s postural relief position exercises are appropriate treatment methods for correcting and preventing forward head posture. Therefore, the purpose of this study was to determine and compare the effect of Pilates and Bruegger’s exercises in conjunction with low level laser therapy (LLLT) for individuals with forward head posture associated TMJD. A two arm parallel study with 30 individuals between the age group of 21 to 40 was conducted. Individuals in group A received Bruegger’s postural relief position exercises with LLLT and group B received Pilates exercises with LLLT. Pain, Range of motion of TMJ, Mandibular function impairment, Craniovertebral Angle was measured at baseline and after 3 weeks by using Visual analogue scale, Ruler, Mandibular function impairment questionnaire and “ON PROTRACTOR” application respectively. Results and Conclusion – Awaited.



Egoscue versus Lumbar Stabilization Exercises in Individuals with Lower Crossed Syndrome on Pain, Posture Stability and Hyperlordosis: A Randomized Controlled Trial



Sherin Elizabeth Sequeira

KAHER Institute of Physiotherapy, Belagavi, India

Abstract

Background: Lower Crossed Syndrome (LCS) is a musculoskeletal imbalance characterized by specific patterns of muscle weakness and tightness that crosses between the dorsal and ventral sides of the body causing postural changes involving increased lumbar lordosis, anterior pelvic tilt leading to postural imbalance. Alterations in postural balance have been reported in individuals with low back pain (LBP) and if left untreated can be challenging to correct in chronic stages. Egoscue exercises (EE) are corrective exercise program that are designed in correcting poor posture, improve whole body postural alignment and reduce musculoskeletal pain. Lumbar stabilization exercises (LSE) also help in correcting the trunk and abdominal musculature. Hence the purpose of the study is to determine the effectiveness of EE and LSE in individuals with pain, lumbar hyperlordosis and postural instability in individuals with LCS.

Methods: The trial recruited 30 individuals aged between 18-40 years with LCS having LBP. Participants were randomized into two groups using a random allocation with a ratio of 1:1. Group A and B were given EE AND LSE respectively 10 sessions for alternate days. The outcome measures are degree of lumbar lordosis, postural stability, functional disability, patient satisfaction towards treatment.

Result and conclusion: Awaiting

Biography

I'm Sherin Elizabeth Sequeira, currently pursuing my 2nd year of Masters in Physiotherapy from KAHER Institute of Physiotherapy, Belagavi. I've completed my Undergraduation in 2020 from Manipal academy of Higher Education, Mangalore. I'm certified in Orthopaedic Manual Therapy from Capri institute of Manual Therapy. My field of interest is in Musculoskeletal conditions and Advanced Physiotherapy.



Comparative Effect of Pilates and Egoscue Exercise on Pain, Function, Proprioception and Peak Muscle Torque in Subjects with Knee Osteoarthritis- A Randomized Parallel Group Study



Namrata .R. Gadekar

KAHER Institute of Physiotherapy, Belagavi, Karnataka, India

Abstract

Background-Osteoarthritis being a common progressive joint disease characterized by pain, impaired function & reduced quality of life. Pilates exercises focuses on core stabilization & improves knee function, strength, flexibility & proprioception. Egoscue uses corrective exercises designed to improve postural alignment reduces musculoskeletal pain & improves joint mobility. There is paucity in the literature indicating which exercise is better in reducing the symptoms of OA knee, Hence the present study intends to compare the effect of pilates & Egoscue exercises on pain, function, proprioception & peak muscle torque in knee OA.

Objectives- To evaluate the comparative effect of pilates and Egoscue exercises on pain, function, proprioception, peak muscle torque in subjects with knee OA.

Methodology- 30 Participants aged 40-65 years are being assessed using visual analogue scale(VAS) for pain, WOMAC index for function, Isokinetic device for peak muscle torque ratio(Ext/Flex), Max Power (Ext/Flex), Endurance Index % (Ext/Flex), Flex/Ext Ratio % & joint position sense test for knee Joint proprioception.

Results- Awaited

Conclusion- The study may or may not show the differences in the effect of pilates and Egoscue exercises on pain, function, proprioception, peak muscle torque in subjects with knee OA.

Keywords

Osteoarthritis , pilates, egoscue exercises, peak muscle torque.

Biography

I Namrata Gadekar presently pursuing Final year of Masters in orthopedic Physiotherapy from KAHER Institute of Physiotherapy. I completed my undergraduate from the same Institution in the year 2020. Musculoskeletal conditions and Advanced Physiotherapy is my area of interest. My way of concept delivery would help me secure my future Aim of Academic practice in field of Physiotherapy.



Effectiveness of Task Specific Exercise Training Versus Graded Motor Imagery in Subjects with Knee Osteoarthritis – A Randomized Clinical Trial



Madhura S. Joshi

Kaher Institute of Physiotherapy, Belagavi, India

Abstract

Osteoarthritis (OA) is the most common musculoskeletal condition seen in aging. Joint destruction, chronic pain and decreased range of motion are the common problems seen in OA. Both Task Specific Exercise Training (TSET) and Graded Motor Imagery (GMI) are effective in chronic conditions such as knee OA for pain and functions. So, the purpose of this study is to evaluate and compare the effectiveness of TSET and GMI in subjects with knee osteoarthritis. **Methods:** A total of 32 patients with unilateral knee pain were included and were randomly assigned to 2 groups: 16 in both TSET group and GMI group. Patients in the TSET group practiced three performance-based tasks and GMI group practiced explicit and mirror therapy. The treatment given was of 9 sessions.

Outcome measures: Peak muscle torque, angle and ratio for quadriceps and hamstrings using Isokinetic testing system, range of motion, Pain was measured using Numerical Pain Rating Scale (NPRS), Knee Osteoarthritis and Other Symptoms (KOOS) was used for ADL and QOL subsets. Three Performance-based outcome measures selected are 30-second Chair Climb Test (30 SCRT), Timed Stair Climb Test (TSCT) and Floor Transfer Test (FTT).

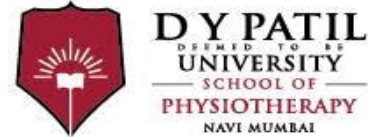
Results and Conclusion: awaited.

Biography

I would like to take this opportunity to introduce myself as Madhura Joshi. I have earned of Bachelors in Physiotherapy in Krishna College of Physiotherapy with First class. Currently I am pursuing my master's degree in orthopaedic physiotherapy at KLE INSTITUTE OF PHYSIOTHERAPY, Belagavi. I have also gained a good amount of applied knowledge by doing many extra certification courses like functional myofascial release, instrument assisted soft tissue mobilization (IASTM), cupping dynamics, therapeutic taping and COMT. I have also attended National Physiotherapy Conference – KNOSPE 2016” organized by KIPT, KIMSUDU, Karad.



Prevalence and Awareness of Musculoskeletal Disorders (MSD) In Biopharma Sales and Marketing Individuals



Malaika Mahapatra

D.Y.Patil University, School of Physiotherapy, India

Abstract

Musculoskeletal disorders have been identified as one of the leading causes of ill-health amongst the working class. MSDs become of significant importance when speaking about pharmaceutical sales and marketing representatives. This is due to their work profile which involves manual handling of goods, carrying heavy samples, and traveling long distances. Their work requires them to spend long durations of their work hours traveling and working in starkly different working environments daily. Their work also prevents them from approaching an occupational/ industrial health specialist as they are often required to work remotely and usually exceed their work hours. Aims of this study was to assess prevalence and awareness of MSDs in pharmaceutical sales and marketing individuals and establishing correlation with their BMI and understanding their response to injury. This study required the use of a self-made questionnaire and the Standard Nordic questionnaire. Maximum are completely unaware regarding faulty posture, ill-effects of work environment on posture and that working from car/ cab can cause MSD. While, maximum are aware that nature of work can cause ill health, driving for long time can cause low back pain, carrying heavy loads for a long time can cause neck and low back pain and prolonged standing can lead to low back, knee and heel pain. Regarding prevalence- prevalence of chronic problems includes low back pain, upper back pain and knee pain. Acute problems include low back pain and upper back pain.

Biography

I, miss Malaika Mahapatra, am a physiotherapy student currently perusing my internship at D.Y. Patil hospital, Navi Mumbai. I am intrigued by the functioning of the human body and am fond of learning new things all the time. My interest lies in the subjects of musculoskeletal and neuro rehabilitation.



Designing and Testing Basic Protocol for Medium Fast Bowler to Increase the Speed and Accuracy



Avinash Kumar Boyat

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

Priyanshu V Rathod

Professor, Faculty of Medicine, School Of Physiotherapy , RK University, Rajkot, Gujarat, India

Abstract

Background: The ability of fast bowlers to maintain their speed (consistency) throughout a bowling spell, or on consecutive days, does not allow a batsman to settle into their innings, and increases the likelihood of their dismissal. The determinants of bowling speed, therefore, have been a major focus in cricket-performance research.

Aim: To study the effect of an protocol based training program on Bowling Speed and Bowling Accuracy.

To study the Kinematic measures in the first four overs pace bowling.

To study the effect of protocol based training on 6RM Squat test, 6 RM Bench Press test and Yo-Yo Intermittent Recovery Test- Level 1

Material and Methods : 60 State Level Male Medium Fast Cricket Bowlers (mean age under 19 boys) were randomly divided into two equal group one group will going to do subject specific protocol based training for 6 weeks and another will be an control group. Before and before after 6 weeks all subject were going to perform 6RM Squat test, 6 RM Bench Press test , Yo-Yo Intermittent Recovery Test- Level 1, Kinematic Analysis ,bowling speed and bowling accuracy testing by Sports Motion Pro Trainer DV Version 2010 , Doppler Radar Gun and the target zone .

Results: The results of the present study support the use of designing and testing of basic protocol for improving the speed in medium fast bowlers as well shows significant improvement ($p < 0.05$) in Front Foot Contact , 6 RM Squat Test , 6 RM Bench Press Test and Yo-Yo Intermittent Level 1 .

Conclusion: The Study shows the use of basic protocol training program is improving the bowling speed of medium fast bowlers and having non -significant effect on bowling accuracy.

Keywords

Cricket, Bowling Speed, Bowling Accuracy, Training Program.



Effect of High Intensity Intermittent Exercise on Neurotrophic Factors in Sporting and Non Sporting Young Adults



Prachi Khandekar

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Abstract

Background: The neurophysiological response to exercise on cognition is modulated through chemical pathways which involves neurotrophic factors such as; Brain Derived Neurotrophic Factor (BDNF), insulin-like Growth Factor-I (IGF-I) and vascular endothelial growth factor (VEGF). Previous literature has shown that secretion of these neurotrophic factors increases in response to High Intensity Intermittent Exercise (HIIE) intervention. Studies lack to show difference in the response of neurotrophic factors levels to HIIE between sporting and non sporting sedentary young adults.

Purpose: The purpose of this study was to evaluate the effect of high intensity intermittent exercise intervention on neurotrophic factors in sporting and non sporting young adults. **Methods:** 40 young adults (22 sporting and 18 non sporting) young adults between the age of 18-30 years were included in this study. HIIE protocol included 4 bouts of cycling for 4 minutes (4*4) at 90–95% HRmax with 3 minutes active recovery at 70% HRmax. Total ten milliliters (10 ml) of venous blood was withdrawn before (5 ml) and immediately after the exercise session (5 ml) from antecubital vein into anticoagulant-free tubes to evaluate serum levels of BDNF, IGF-I and VEGF. ELISA analysis was used to assess the concentration of these neurotrophic factors.

Results: Our results demonstrated that there was a significant effect ($P<0.05$) of HIIE intervention on the level of serum BDNF, IGF-I and VEGF in our participants. Two way ANOVA showed a significant ($P<0.05$) difference in the effect of HIIE on these neurotrophic factors, between sporting and non sporting young adults.

Conclusion: Our study concludes that an increased level of neurotrophic factors is seen serum in response to acute HIIE intervention and this response is different in sporting and non sporting young adults.



A Literature Review on the Effect of Yoga Therapy in Rehabilitation in Orthopedics Health Conditions



Ujjwala Sharma

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Dr. Mohd Nasim Mansoori

Jai Prakash Narayan Apex Trauma Center AIIMS New Delhi, India

Dr. Vijay Sharma

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Abstract

Nowadays orthopedic problems are rapidly increasing due to urbanization, road and railway accidents, natural calamities, stress. Stress becomes the main reason to corrode health and modern medical treatment is ineffective. The orthopedic lifestyle disorders are unprecedented high. The need for management and rehabilitation methods for orthopedic problems including trauma and other musculoskeletal health problems. Yoga is used as a holistic therapy, Yoga is having the potential to relieve both the physical and psychological suffering of people with orthopedic problems. The objective of this study was to conduct a systematic review and meta-analysis of the existing research on the effects of yoga on orthopedic problems. For evidence-based Yoga application, abundant numbers of clinical trials have been carried out to evaluate the effects of yoga practice in orthopedic health problems, with significant results of improvement in quality of life in orthopedic patients. A narrative review is undertaken based on traditional and contemporary literature for yoga, along with the scientific articles available on yoga for various orthopedics problems in the last 5 years. Our literature search began in Dec 2021 and continued through Jan 2022. PubMed, Theses, Google Scholar, and Clinicaltrials.gov databases were searched electronically. The search terms used were: yoga AND orthopedic AND trauma. Findings of Research in Yoga for orthopedic showed the regular practice of Yoga can improve the quality of life of the patients with improvement in bone health. Regular Yoga practice improves individual's/practitioner's strength, endurance; flexibility, and changes in characteristics like sociability, kindness, and self-control, and cultivates a sense of calmness and well-being.



Biography

Ujjwala Sharma is a Ph.D. scholar in Jagdishprasad Jhabarmal Tibrewala University (JJTU) Jhunjhunu, working as Junior Research Fellow in ICMR Funded project in the department of orthopedics Jaiprakash Narayan Apex Trauma Center AIIMS New Delhi. Dr. Mohd Nasim Mansoori is Research Associate III in ICMR Funded project in the department of orthopedics Jaiprakash Narayan Apex Trauma Center AIIMS New Delhi. Dr. Vijay Sharma is a Professor in the department of orthopedics Jaiprakash Narayan Apex Trauma Center AIIMS New Delhi.



Effect of Hold-Relax PNF technique combined with Myofascial Release Therapy on Episodic Tension Type Headache in student population in Belagavi city, A Randomized Controlled Trial



Neha Yadav

KLE Institute of Physiotherapy, India

Abstract

Background: Tension type headache (TTH) is the most prevalent type of primary headache in adults. Long term headache can have a great impact on the daily life of the patient in aspect of emotions, daily work and general life activities. This study is being carried out to find if PNF therapy has any effects on episodic tension type headache.

Methods: Thirty-six people (male=14, female=22) were included in this study on the basis of inclusion and exclusion criteria. These subjects were allocated in two groups, where group A (n=18) was experimental group and group B (n=18) was control group. Here group A was given PNF contract relax technique which was combined with myofascial release therapy, whereas group B was only given myofascial release therapy. The intervention was performed for three weeks (3 days/week) for each group. The outcome measures included were Headache Disability Index (HDI) Headache Impact Scale (HIT-6) Global Rating of Change Scale (GROC) and Numeric Pain Rating Scale (NPRS).

Results: Comparison of Group A and Group B and day1, day 5 and day 9 was done using parametric test, independent t test was done. Comparison of group A and group B shows significant difference ($p=0.0068$) on day 5 of intervention. Follow-up data shows improvement in the scores and shows significant difference of ($p=0.05$) with mean ($m=20.50$ and 37.11) in group A and group B respectively

Conclusion: Our study concluded that PNF shows improvement in pain and function in people with episodic tension type headache. However, if treatment is given in combination of both the techniques, it shows a marked improvement in intensity of pain and frequency of pain episodes.

Keywords

Tension type Headache, Proprioceptive Neuromuscular Facilitation, Myofascial Release



Biography

I would like to take this opportunity to introduce myself to you. My name is Neha Yadav passionate 2year post graduate student, pursuing specialty in NeuroPhysiotherapy at KLE Institute of Physiotherapy College. Furthermore I have appeared for two additional workshops and secured certificate entitled as “Certified Orthopedic Manual Therapist” and “Certified Dry Needling Therapist”. Currently as a post graduate student working in 4 research projects, one of which involves development of multisensory tool, undergoing for patency.



Association of Pain, Strength with Disability in Upper Limb Among Physiotherapy Students Using Smartphone



Shirgaonkar FATIMA

Intern at Lokmanya Tilak College of Physiotherapy, India

Parle JYOTI

COMMUNITY PT HOD, Lokmanya Tilak College Of Physiotherapy, India

Abstract

Smart phone is a hand held portable device having a touch interface performing the function of a laptop and a hand phone used for tasks such as internet browsing, gaming, texts, e-learning, social media and many more daily activities. Frequent usage may result in cumulative trauma disorders to the shoulder, elbow, wrist. Aim of this study was to find out the association of pain, strength with disability in upper limb among physiotherapy students using smartphone. This study will help to assess the influence of smart phone usage leading to pain which eventually affects the hand grip strength leading to disability. For this study 75 physiotherapy students in the age group 18-24 experiencing pain in upper limb while using smartphone were considered. A questionnaire consisting of demographic details, NPRS, questions on usage of smart phone was administered. In students having pain hand grip assessment will be carried out using Jamar hand dynamometer followed by administration of DASH questionnaire. Results indicated 61% students showed reduced grip strength, 20% students showed moderate disability, 76% showed mild disability. Since the p value < 0.05 between the variables hence there is an association of pain, strength with disability in upper limb. It was concluded that smartphone usage in students showed reduced grip strength with mild disability.

Biography

Fatima Aslam Shirgaonkar

Intern at Lokmanya Tilak College Of Physiotherapy, Kharghar, Navi Mumbai.



**Work Related Musculoskeletal Disorders (WRMSDs) in
housemaids of Mumbai Metropolitan Region: A Cross
Sectional Study**



Vaishnavi Kokate

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Dr. Pooja Agarwala

Assistant Professor, Lokmanya Tilak College of Physiotherapy, India

Abstract

When the workplace environment has a direct impact on the development of musculoskeletal disorders, it is termed as WRMSDs. Housemaids work for continuous hours in irregular postures consisting of repetition, static postures for long hours and strain over muscles. They are unaware about ergonomics and how these factors impact their health. Due to repetitive strain, WRMSDs may reduce work efficiency and further reduce their quality of life. This study was conducted to check the WRMSDs in housemaids of Mumbai Metropolitan Region and its correlation with age. A cross sectional study using Cornell Musculoskeletal Discomfort Questionnaire was conducted .

Housemaids with minimum 1 year of experience aged between 20-60 years were included. The discomfort, severity and interference was marked. Results show that 53% report moderately uncomfortable in lower back with 46% interference , and 36% moderately uncomfortable in knees with 46% interference .



Effect of Prone Traction, Abdominal Strengthening and Surged Faradic Current in Lumbar Canal Stenosis-A Case Report



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Abstract

Background-Lumbar Canal Stenosis (LCS) is one of the reasons of low back pain in adults, caused by degenerative disc condition or thickening of Ligamentum flavum (LF).

Patient information-We present the case of 72 year old male , suffering from low back pain (Pain intensity -8 on Numerical pain rating scale-NPRS) and neurological claudication (symptoms appears after 2 minutes of walking. Investigation revealed LF hypertrophy at lumbar level. On palpation, we found spasm of paraspinal muscles.MMT of hip the Gluteus Maximus was grade 3.Reduced range of lumbar flexion was found.

Procedure-Generally the traction is preferred in supine position but we gave the patient traction in prone position. Also we worked on Abdominal muscle and Gluteus Maximus muscle strengthening , which is generally ignored. Along with that we gave Surged Faradic (SF) current on paraspinal muscles and phonophoresis at the site of LF thickness.

Result-The patient was able to walk for 20 minutes without experiencing any symptoms after following this 8-day intervention strategy, and the level of pain was reduced to a 4 on the NPRS.

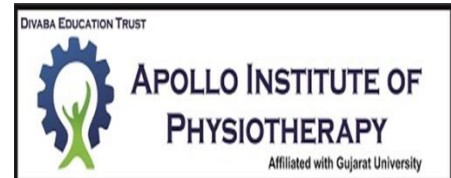
Conclusion-Prone traction ,core muscle strengthening exercises, phonophoresis for LF hypertrophy and SF for paraspinal muscle spasm all together had tremendous effect on our patient with LCS.

Key Words

Lumbar Canal Stenosis, Surged Faradic, Prone Traction.



To Find Correlation between Myofascial Trigger Points on Upper Trapezius and Severity of Cervicogenic Headache



Prachi Thakkar

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Dharti Shah

PhD Scholar, Assistant Professor, Apollo Institute of Physiotherapy, Gujarat University, India

Abstract

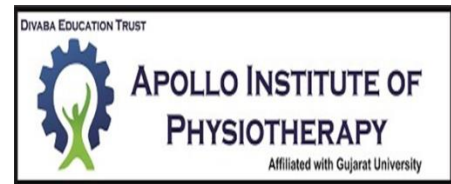
Introduction: Myofascial pain referred from hyperalgesic trigger points located in skeletal muscles and its associated fascia, is a common cause of persistent regional pain. Cervicogenic headache is the secondary headache caused by a disorder of cervical spine and its components which may include bony, disc, and/or soft tissue elements. Approximately 47% of the global population suffers from a headache and 15-20 percent of those headaches are cervicogenic. Aim: To find out correlation between myofascial trigger points on upper trapezius and severity of cervicogenic headache among college going students. Methodology: Volunteers with complaint of pain in upper neck and head will be selected, written informed consent form will be taken. Cervical flexion rotation test will be performed along with palpation of myofascial trigger points on upper trapezius. Headache disability index will be taken. Results/Conclusion: Awaited.

Keywords

Myofascial trigger point, Cervicogenic headache, Upper trapezius, Headache severity.



To Compare the Effectiveness of Strong Surged Faradic Electrical Stimulation and Ultrasound in Young Individuals with Upper Trapezitis



Shitalben Panchal

MPT student, Apollo Institute of Physiotherapy, Gujarat University, India.

Kairavi Trivedi

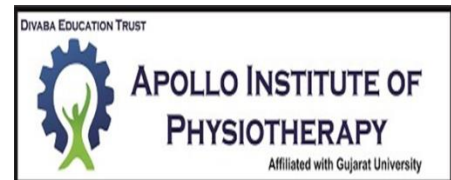
PhD Scholar, Assistant Professor, Apollo Institute of Physiotherapy, Gujarat University, India

Abstract

Introduction: Trapezitis is an inflammation of trapezius muscle which can cause neck pain, muscle spasm, tenderness, stiffness, limitation of cervical movement. Surged Faradic electrical Stimulation is use for reduction of pain and improving joint range and mobility. Ultrasound also reduces pain and increase functional ability of subjects. Aim: To compare the effectiveness of strong surged faradic electrical stimulation and Ultrasound in young individuals with upper trapezitis. Methodology: Present study was started with subjects with trapezitis who met the inclusion criteria. All participants voluntarily participate in this study after explaining the procedure of the study. All subjects were asked to fill and sign a consent form after explaining the purpose of the study. Then measured pain, cervical range of motion and distributed the questionnaire for neck disability index for measuring cervical disability. Subjects were randomly divided into two groups. Group=A received strong surged faradic electrical stimulation and Group=B received ultrasound. Passive stretching and MFR for upper trapezius muscle and active neck range of motion exercise was given to the both group. Total number of treatment was 3 session/week for a 2 weeks. Outcomes Measures: Pain was measured by visual analogue scale (VAS), Cervical range of motion was measured by universal goniometer and Functional disability was measured by neck disability index (NDI).Result: Awaited.



Relationship of Kinesiophobia with Physical Activity, Balance and Fear of fall in Oa Knee Patients



Zohara Himani

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Kairavi Trivedi

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Abstract

Introduction: Kinesiophobia is the fear of movement and activity resulting from a feeling of fear of pain, injury or re-injury. Fear of movement or pain should be taken into consideration for the management of patients with OA knee. The clinicians must consider the correlation of fear of movement and functional outcomes while setting daily therapeutic exercise programs. Aim: This study aimed to examine the relation of kinesiophobia with physical activity, balance and fear of fall. Method: This study examined the association of kinesiophobia with physical activity, balance and fear of fall in OA knee patients with age group between 50 to 75 years. The Tampa Scale of Kinesiophobia was used to assess kinesiophobia, International Physical Activity Questionnaire (IPAQ)-short form was used to assess physical activity, Berg Balance Scale was used to assess balance, Falls Efficacy Scale was used to assess the frequency of fall, Visual Analog Scale was used to evaluate the pain, Knee Outcome Survey-Activities of Daily Living Scale were used to evaluate the patients. Results: Awaited



Physiological Determinants of 5-Kilometer Running Performance in Endurance Athletes



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Parveen A

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Abstract

The purpose of this study was to examine the association of weight, height, skin fold thickness (SFT), maximum heart rate (MHR), predicted maximum heart rate (PMHR), training status, body mass index (BMI), sport played and 5-km time-trial running performance (5KTRP) and to determine the predictors of 5 km endurance running performance in male and female endurance athletes. A sample of twenty endurance athletes (age=22.60±2.5; height=1.62±0.09; weight=57.20±6.07; BMI= 21.45±1.35) was recruited in the study. The sum of SFT (SSFT), MHR, PMHR, training status, BMI, sport played and 5KTRP were measured and documented. The pearson's correlation coefficient was found to be significant between SSFT-weight($r=0.927, p<0.01$), SSFT-height($r=0.780, p<0.01$), SSFT- training status($r=-0.478, p<0.05$), SSFT-MHR($r=0.915, p<0.01$), SSFT-5KTRP ($r=0.973, p<0.01$), MHR-weight($r=0.921, p<0.01$), MHR-height ($r=0.840, p<0.01$), PMHR-training status($r=-0.450, p<0.05$), 5KTRP-weight($r=0.895, p<0.01$), 5KTRP-height($r=0.736, p<0.01$), 5KTRP-training status ($r=-.463, p<0.05$). The multiple regression model came out be significant($r^2=0.94, p<0.001$) between SSFT, height, weight, training status, MHR as a set and 5KTRP. This study concludes that the SSFT, height, weight, training status and MHR can be used to determine and predict the 5KTRP. Also, there was a no association between the gender-5KTRP and predicted-observed MHR.

Keyword

skin fold thickness, maximum heart rate, training status, body mass index.



Reliability and Validity of Hindi Translation of Foot Function Index in Patients with Ankle and Foot Problems



Vedeeeka Goje

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Abstract

Introduction: Patient-reported outcome (PRO) measures provide assessments of characteristics of impairments experienced by patients that most of the health care professionals are unable to investigate directly. Existing information for measurement qualities such as reliability, validity, and sensitivity to change is used to assess the clinical value of patient-reported outcome measures. Due to the importance of the foot in locomotion, foot dysfunctions are frequently causing pain and associated with a reduced capacity to conduct daily activities. Furthermore, there is an increased risk of foot dysfunctions, while walking obstacles, accidental falls, and further injuries. The foot function index is an outcome measure that is used to assess the difficulty and pain in patients with foot problems, it has been translated to various languages like Korea, German and Danish etc. Hindi is the National language for India, and therefore there is a need for Hindi translation of foot function index to assess or to find out the disability, difficulty and pain in foot related pathologies in Indian population.

Aim: To translate the foot function index in Hindi and assess its reliability and validity.

Methodology: The English scale was translated to Hindi by a translator and was back translated to English. The scale will be given to patients with ankle sprain, foot fractures and plantar fasciitis to assess its reliability.

Conclusion: will be concluded after the study is completed.

Keywords

reliability and validity, translation, foot function index



Prevalence of Awareness about Scapular Dyskinesis in Male Indian Boxers: An Observational Study



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Ashwini Kshirsagar

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Abstract

Background: Scapular dyskinesia is termed as abnormal static position and dynamic movement of the scapula. Boxer's shoulders and neck might develop microtrauma from repeated hitting and being punched in the face. Repeated microtrauma from sustained eccentric loading can develop anterior capsule laxity and posterior capsule tightness, leading to scapular dyskinesia. In boxers, the prevalence of scapular dyskinesia is reportedly higher than among non-boxers. Therefore, understanding the characteristics of scapular dyskinesia is important to reduce the risk of injuries among boxers.

Aim: To determine the prevalence of awareness about scapular dyskinesia in male Indian boxers.

Method: - The current observational study comprises only male boxers aged 18 to 36 years old from various Indian boxing institutes, and those willing to participate in the study were the selection criteria for this study. They were instructed to complete a self-administered online survey. The survey contained ten questions about scapular dyskinesia awareness.

Result: In this study, 171 boxers completed an online questionnaire. The samples were subjected to a descriptive analysis to see if there was a statistically significant mean difference between them. In the research, 31.20% of boxers had adequate knowledge of scapular dyskinesia, while 68.74 % of boxers had inadequate knowledge of scapular dyskinesia.

Conclusion: - The current study concluded that there is a poor prevalence of awareness about scapular dyskinesia in male Indian boxers.

Keywords

scapular dyskinesia, boxers, shoulder, prevalence



An Evidenced Based Effectiveness of Cupping Therapy on Hamstrings Range of Motion and Flexibility in Young Individuals



Dr. Prachi Shah

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Abstract

Background: Flexibility is an important aspect of physical performance in sports as well as in daily activities of living and when deficient can increase the risk of injury. Cupping therapy is an alternative traditional technique useful in many musculoskeletal conditions and in various kind of diseases associated with pain. It is a negative pressure soft tissue treatment technique using suction cups to manipulate the skin and underlying soft tissues.

Purpose: To review the effects of cupping therapy on hamstring flexibility and ROM.

Methodology: We conducted an evidenced based review of 5 articles using data source GOOGLE SCHOLAR. This mainly consist of randomized control trials, cohort study and experimental trials recently published from 2017 to 2021 in measuring the effects of cupping on hamstrings flexibility and ROM. Studies were excluded which didn't match with the inclusion and exclusion criteria based upon title and abstract. In this study we organized the literature as follows: 1) summarizing the literature According to year (from older to recent ones), 2) According to level of evidence 3) study design, 4) Patient's characteristics and degree of tightness, 5) Interventions given, and its duration, outcome measures and Assessment (baseline, pre and post) and finally 6) Results of studied literature. Evidence in this study even shows effectiveness of fire cupping on pain, muscle activity along with flexibility and ROM compared to passive stretching in hamstrings muscles. Some Literature is this study summarizes the effectiveness of stationary cupping alone and some along with cupping with movement on hamstrings flexibility (active and passive length), ROM, pain and muscle strength.

Conclusion: Study concluded that cupping therapy is effective in improving ROM and flexibility of hamstrings muscles but further study is required to measure its long-term effectiveness and its standard duration of application.



Effect of Scapular Stabilization Exercises on Upper Limb Recovery in Chronic Stroke Participants: - An Experimental Study



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Savitriben Patel College of Physiotherapy, Veer Narmad South Gujarat University, India

Abstract

Background: The scapular stabilizers are the major factors contributing to functional restoration of the upper extremities in stroke patients.

objective: The purpose of the study to determine the effect of scapular stabilization exercises on upper limb recovery in chronic stroke participants.

Methods: The study is an experimental study in which 30 subjects with chronic stroke were randomly assigned in two groups (n= 15), group I was administered conventional therapy and group II, conventional therapy along with scapular stabilization exercises for 5 days per week, for 4 weeks. Fugl-Meyer Assessment Scale for upper extremity and Action Research Arm Test were used to assess changes between baseline and post intervention. Wilcoxon Signed Ranks Test was used to compare the difference within the groups at two time periods –baseline and after 4 weeks. Mann Whitney U Test was used for comparing means between all the two groups.

Results: There was a significantly greater improvement in the function of paretic upper limb in group II compared with group I. But there was a less statistically significant improvement in Action Research Arm Test than Fugl-Meyer Assessment Scale for upper extremity.

Conclusions: Scapular stabilization exercises along with conventional therapy are more effective than conventional therapy alone in improving upper extremity recovery in chronic stroke patients.

Keywords

Stroke, Scapular stabilization exercise, Upper extremity, Fugl-Meyer Assessment Scale, Action Research Arm Test.



Biography

Dr Tejashvikumari Nathubhai Patel, Assistant professor at Savitriben Patel College of Physiotherapy, Veer Narmad South Gujarat University. I had earned my bachelor's degree in physiotherapy from SPB Physiotherapy College; Veer Narmad South Gujarat University. I had an experience of Two years as clinical physiotherapist at Shrimad Rajchandra college of Physiotherapy, UKA Tarsadia University. I had completed my masters in Neurological Science from Shrimad Rajchandra College of Physiotherapy, UKA Tarsadia University. Along with teaching-learning, I am having interest in research work as well. My primary research interests are stroke rehabilitation, Paediatric Rehabilitation.



Calf Pain Common Differential Daignosis and its Physiotherapeutic Management : A Narrative Review



Dr. Vrushti Bhatt

Ahmedabad Physiotherapy College, India

Abstract

Narrative review is one of the type of the review of literature and its purpose is to identify a few studies that describe a problem of interest. This type of study provides a synthesis or description of literature review without using quantitate methods. In this present review similarly latest articles are referred. Selected differential diagnosis and its recent information available are listed into the review along with its physiotherapeutic management. There are many conditions which may have a common complaint of calf pain which if not diagnosed properly and managed properly can remain for longer period of time and its reoccurrence may cause frustration in both patient as well as practitioner. Newer articles related to the common differential diagnosis like muscle strain, muscle contusion, DOMS, myofascial structures, muscle cramps are included. Physiotherapeutic management is always considered to be tailor made thus working on the cause rather than temporary reduction of the symptoms .There are many recent techniques which when provided along with manual therapy has shown better results when the cause of the calf pain is identified and correct treatment is provided. Techniques such as kinesiological taping, tecar therapy and other electrotherapeutic modalities when provided along with exercise protocol has shown good results in patients complaining of calf pain.

Key words

Muscle strain, Muscle cramps, Muscle contusion, Tecar therapy, kinesiological taping.

Biography

Designation: MPT student (Musculoskeletal and Sports Science)

Category of participation: **PG paper presentation**



Immediate Effect of Craniosacral Therapy in a Patient with Non-Specific Low Back Pain- A Case Report



Syeda Sameeha Tartil

MGM School of Physiotherapy, Aurangabad, India

Abstract

Introduction: In the middle-aged population, low back discomfort is a prevalent condition. In her everyday routine, a housewife has a lot of work. The majority of housewives are unaware of ergonomics, which puts them at risk for musculoskeletal illnesses, particularly low back discomfort. Women who have learned to live with distress are more risky. Craniosacral therapy is a manual treatment method that is very light touch and it is used to put patient at ease so help to alleviate various kinds of pain, it is the method which tries to get deep down into the CNS or even beneath it to facilitate movement of cerebrospinal fluid and movement of blood flow and things of the body to improve the body's ability to heal it self.

Description: For the past year, a 40-year-old female housewife had been suffering from chronic low back pain and had been treated with physiotherapy and drugs. She went to the Orthopaedic outpatient clinic after experiencing a recent recurrence of discomfort, and she was prescribed physiotherapy. Her normal functions were disturbed.

Procedure: To reduce pain and restore lumbar spine mobility, a procedure called craniosacral treatment was used.

Result: The result was calculated based on the pre-treatment and post-treatment sessions using various outcome measure tools that showed significant changes in the pain intensity and measurement.

Purpose: There is immediate effect of craniosacral therapy for low back pain in a patient with chronic low back pain which aids in pain relief, leading to improved functional activities of daily living and speeding up positive physical therapy outcomes.

Limitations: The results of this case study cannot be extrapolated to a larger sample size because it is a case study. More research is needed to better understand how to choose Craniosacral therapy and how effective it is over time.

Key words

low back pain, craniosacral therapy, case report, housewife.



Effectiveness of Proprioceptive Exercise for Osteoarthritis Knee Patients



Manju Bhashini. E

Meenakshi Academy of Higher Education and Research, India

Abstract

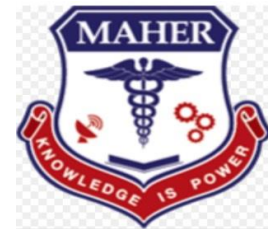
Pain, joint stiffness, restricted joint motion, quadriceps weakness, and proprioceptive impairments are all symptoms of knee osteoarthritis. The patellofemoral joint causes discomfort by affecting kinematics due to articular cartilage deterioration, changes in the subchondral bone, changes in soft tissues, and increasing articulation deformity. Individuals' ability to perceive joint position and movement is known as joint proprioception. Age, muscle weariness, obesity, and osteoarthritis are all known to have an impact on proprioception. The perception of joint motion and joint position is encompassed by the knee joint. Proprioception is a sensory system that aids in the stabilization of joints during both static and dynamic functional tasks. Impaired proprioception, on the other hand, can lead to weak bones, changes in joint stability, and loss of joint motion control. This could be a major contributor to recurring injuries. Proprioceptive exercise improves knee function in individuals with Knee Osteoarthritis by focusing on the development of proprioceptive receptors, also known as mechanoreceptors. Proprioceptive training aims to improve knee joint muscle function as well as discomfort levels. Knee osteoarthritis can be managed effectively with proprioceptive exercise.

Biography

My name is MANJU BHASHINI. E. I am doing my Master's degree in Physiotherapy (Orthopedics) at Meenakshi Academy of Higher Education and Research, Chennai. I have completed my undergraduate degree at Saveetha college of Physiotherapy, Chennai. During my last year of undergraduate period, I have done a thesis on "Effect of kinesiotaping in improving swallowing function among patients with post stroke dysphagia".



Effectiveness of Core Stability Exercise for Knee Joint Osteoarthritis



Preethi Jesentha. L

Meenakshi Academy of Higher Education and Research, India

Abstract

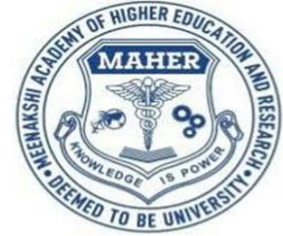
The Knee is the body's largest joint. It is a weight-bearing component that is frequently impacted by Osteoarthritis. Osteoarthritis of the knee is characterized by pain, joint stiffness especially after prolonged rest or walking, crepitations, and synovitis with or without joint fluid effusion. Later, there is a reduction in functional activity. Muscle atrophy can occur, then it affects the joint's stability and function. The lumbopelvic-hip complex, which includes the abdominal, paraspinal, gluteus, and pelvic floor muscles, is referred to as the "Core." If the Core muscle is strong, the hip, knee, and ankle muscles will be as well. The core stability exercise has a relationship with hip, knee, and ankle stability. This is because all areas of the body are connected to one another, both directly and indirectly. An exercise to improve neuromuscular ability is defined as core stability exercise. Increase muscle strength, improve posture, reduce pain, improve ability, and functional mobility in patients are all goals of Core stability training.

Biography

PREETHI JESENTHA. L is a Master of Physiotherapy (Orthopaedics) student at Meenakshi Academy of Higher Education and Research in Chennai. My Undergraduate studies were completed at Saveetha College of Physiotherapy in Chennai. In 2017 and 2016, I exhibited posters on "Virtual reality treatment - A possible future intervention for cerebral palsy" and "Altered Knee Mechanics in Osteoarthritis Knee Patients." "Effects of High Intensity Interval Training and Moderate Intensity Continuous Training on Maximum Oxygen Consumption and Resting Heart Rate in Coronary Artery Disease Subjects," completed thesis in 2018.



Vibration Therapy in DOMS



S Swathi

Meenakshi Academy of Higher Education and Research, India

Abstract

DELAYED ONSET OF MUSCLE SORENESS (DOMS) is exercise related muscle pain and stiffness occur several hours to days develops after excessive, unaccustomed exercise. after exercise: caused particularly if the exercise prevalent to eccentric component can result in follows:muscle rupture,microscopic lesion, actin myosin separation, enzyme efflux theory.doms usually caused by excessive lengthening exercises, due to increased intensity exercises , due to a volume of training , altered exercise schedule,new physical activities is implemented. The presence of DOMS increases risk of injury. A reduced range of motion may lead to the incapability to efficiently absorb the shock that affect physical activity. Alterations to mechanical motion may increase strain placed on soft tissue structures. Vibration could represent an effective exercise intervention for enhancing neuromuscular performance in athletes. Vibration has shown effectiveness in flexibility and explosive power. Vibration can apply either local area or whole body vibration. Vibration therapy improves muscular strength, power development, kinesthetic awareness, decreased muscle sore, increased range of motion, and increased blood flow under the skin. VT was effective for reduction of DOMS and regaining full ROM.



Prevalence of Upper Cross Syndrome in Physiotherapy Students: A Cross-Sectional Study



Dr. Payal Prajapati

Ahmedabad Physiotherapy College, Ahmedabad, India

Abstract

Upper Cross Syndrome (UCS) is becoming more dominant in students characterized by muscular imbalance. Muscular abnormalities and adapted poor posture are related to each other. Students requiring sustained flexed posture for prolonged period of time is a major predisposing factor for UCS. Physiotherapy students are more susceptible of getting work related health problems by ignoring their posture during study and treatment of patients. So, it is important to find out the prevalence and it will further enhance the confirmatory methods to cure and also prevent UCS in students. In this cross-sectional study, 200 physiotherapy students age between 18 to 25 years were selected from Ahmedabad Physiotherapy College (APC) by random sampling method. Participants were evaluated by REED-CO scale for postural alignment and special test related to muscles. Results show 10 positive students of UCS with the prevalence of 5%, on the basis of any three positive findings of UCS. In which 50.35% shoulder asymmetrical, winging of scapula 19.64%, weakness of deep neck flexors 19.28% were documented. Based on REED-CO scale, results showed as negative for UCS. The relation between UCS and poor posture were seen in this study. This study relates with how the victim of UCS got addicted to bad posture or it is 'luxuriate in study' which makes students to get addicted to poor posture which may lead to muscular abnormalities that will result into UCS.

Keywords

UCS, Physiotherapy students, Posture, Muscular imbalance



Intense Exercise A Cause Of Secondary Amenorrhea in Sprinters..?



S. Aarthi

Meenakshi Academy of Higher Education and Research, India

Abstract

Intense exercise a cause of secondary amenorrhea in sprinters. It is of two types that is Primary Amenorrhoea and secondary amenorrhoea. Primary amenorrhoea is of no menstruation by the age of 14yrs accompanied by failure to grow properly or develop sex sexual characteristics. Secondary amenorrhoea is the absence of mensus for six months in a women who has menstruation before. Some of the intervention to maintain the healthy guideline are balance energy expenditure with energy intake, Modify diet to maintain ideal weight, avoid cigarette smoking, balance work, recreation and rest. Yoga will helps in secondary amenorrhea. some of the asanaas are bhujangasana, bhaddha konasana(bound angle pose).



Effects of Ballistic Six Exercise Protocol on Throwing Performance of Overhead Athletes: An Evidence Based Study



Aditi Mahesh Dashondi

MPT (SPORTS SCIENCE) GPC, Ahmedabad, India

Manmitkaur A

Gill MPT Musculoskeletal Senior Lecturer GPC Ahmedabad, India

Abstract

Introduction: Plyometric exercises are a group of exercises, developed basically for power generation in rehabilitation of performance based programs. Power generation is an integral component for strength and conditioning which in-turn helps in performance enhancement. Ballistic six exercise protocol includes six different type of short cycle eccentric upper extremity exercises. The basic aim of such training is to strengthen the shoulder musculature of overhead throwers for better power generation followed by improved throwing performance. Adequate strength in shoulder girdle muscles ensures prevention of any high speed decelerating injuries such as tendon tears, SLAP lesions or overuse syndromes like rotator cuff tendinitis, supraspinatus tendinopathy, impingement pathologies Gleno-humeral internal rotation deficit which are common with excessive throwing as seen in bowlers, baseball pitchers, volleyball spikers, gymnasts, swimmers etc. Intervention such as stretch shortening cycle exercises are helpful in improving neuromuscular control, endurance, power and sports vision.

Method: Relevant articles were searched using the various search engine google scholar, pubmed, scienceDirect, Cochrane, SportsDiscus were selected from 2006-2021. Various MeSH like ballistic six exercise protocol, overhead athlete, throwing were used and 1040 articles were found. The articles were reviewed based on modified sackett scale, PeDRO and inclusion criteria.

Result and Conclusion: Initially 1146 records were extracted and out of them only 10 articles best fitted to the eligibility criteria and were selected, out of which 6 articles concluded that ballistic six protocol had a moderate to severe significance on throwing performance of overhead athletes.

Keywords

Ballistic six exercise protocol, throwing, overhead athlete



Effect of Pulmonary Rehabilitation on lung function in Patients with Pulmonary Tuberculosis Sequelae (PTBS): A Systematic Review



Mir Shabnum Ara

Centre for Physiotherapy and Rehabilitation Sciences, Jamia Millia Islamia, New Delhi, India

Dr. Aqsa Mujaddadi

Centre for Physiotherapy and Rehabilitation Sciences, Jamia Millia Islamia, New Delhi, India

Abstract

Background: Tuberculosis (TB) is the ninth highest cause of mortality worldwide and the top cause of death caused by a single infectious agent, surpassing HIV/AIDS. Its prevalence in developing countries is high. Patients with pulmonary tuberculosis (PTB) frequently have reduced pulmonary function as a result of the disease's structural alterations, as well as significant negative effects on the patient's quality of life. Pulmonary rehabilitation (PR), an evidence-based interdisciplinary comprehensive non-pharmacological intervention has been advocated as a standard of care for individuals with PTB.

Objective: This review aims to systematically evaluate the impact of pulmonary rehabilitation (PR) on exercise capacity (6MWD), HRQL and Lung function in individuals with treated PTB.

Methods: We searched in PubMed, Scopus, Web of Science and Cochrane library for relevant studies and scanned reference lists of relevant studies from these databases for additional studies. Articles that met the criteria for inclusion were included. Two reviewers separately extracted pre-determined data.

Results: Scores of PFTs improved by the end of the treatment.

Conclusion: There is limited evidence on PR design and efficacy in tuberculosis but available data support its use in the pulmonary tuberculosis sequelae. In conclusion, pulmonary rehabilitation is an effective intervention and a new hope for the patients with healed pulmonary tuberculosis/PTS. It is a treatment that improves exercise tolerance and quality of life. Future studies should report core outcome sets and their individualised exercise and education regimens.

Keywords

pulmonary tuberculosis/PTB, pulmonary rehabilitation, 6MWT and HRQL.



Biography

I, Mir Shabnum Ara a post graduate student pursuing Masters of Physiotherapy(Cardiopulmonary) at the CPRS Department of Jamia Millia Islamia,New Delhi. I have completed my Bachelors of Physiotherapy from Jammu College of Physiotherapy Jammu under Jammu University and 6 months of internship from Government Medical College of Jammu. Dr. Aqsa Mujaddadi is an Assistant Professor at JMI University (pursuing PhD,MPT cardiopulmonary), having 17 citations under her name and an h-index of 2.



Effectiveness of Flow-Oriented Incentive Spirometer on Lung Function after Upper Abdominal Surgery



Dr. Parthkumar Devmurari

School of Physiotherapy, RK University, Rajkot, India

Abstract

Prevention and treatment of postoperative pulmonary complications following abdominal surgery.

Methodology: In this study 24 patients were recruited and divided in two groups in which one group received conventional chest physiotherapy and other group received flow-oriented incentive spirometer in addition. Spirometric values of FEV1 and FEV6 as primary outcome were obtained one day after surgery and three days after surgery.

Results: The data were analyzed with using SPSS (Statistical Package for Social Science), Epi Info and STATA/IC-13 software. There was significant difference in control (Group-A) and Experimental group (Group-B) in FEV1, FEV6, VAS, Chest Expansion and Six Minute walk Distance test (6MWDT) ($p = 0.00$) in both groups.

Conclusion: there was significant improvement in FEV1 and FEV6 along with other outcome measures within both the groups after physiotherapy. However, there was no significant difference between groups.

Keywords

Abdominal Surgery, Upper Abdominal Surgery, Post-Operative Pulmonary Complication, Incidence, Deep Breathing Exercise, Incentive Spirometry

Biography

Dr. Parthkumar Devmurari PT

Assistant Professor & Head of the department – Cardio-pulmonary Physiotherapy, an Assistant professor, having more than 6 years' experience in teaching and research field. Having more than 5 original research publications in SCOPUS and WOS indexed journals. Currently working on prototype designing for breathing re-training.



Reliability and Validity of Gujarati Version of International Physical Activity Questionnaire Short Form in Middle Aged Adults – An Observational Study



Shah Heli Paragbhai

Master of Physiotherapy in Musculoskeletal (Orthopaedic) Science, Shree Swaminarayan Physiotherapy College, Ranip, Ahmedabad, Gujarat University, India

Dr. Kamal Parvez Zaiwala

Master of Physiotherapy in Musculoskeletal (Orthopaedic) Science, Shree Swaminarayan Physiotherapy College, Ranip, Ahmedabad, Gujarat University, India

Abstract

Background: Amongst the various challenges India is facing as a developing country, one such grave challenge is the public health and nutritional transition. Physical activity has proved to either eliminate the risk or deter the chances of developing such grave conditions in the individuals in the society. These scales are not available in Gujarati Version. Hence, if the reliability and validity of this study is good, it will be helpful for clinical use and community also.

Purpose: To check reliability and validity of Gujarati version of IPAQ-SF in middle aged adults.

Methodology:

Subjects: 75 middle aged adults (34-60years)

Study Design: An Observational Study

Method: English version of IPAQ-SF was translated in Gujarati version and 75 middle aged adults were given to fill the Gujarati version of IPAQ-SF questionnaire and from that Test retest reliability and validity will be calculated.

Result: Awaited

Conclusion: Awaited

Keywords

IPAQ-SF, Gujarati Version



Biography

NAME OF CANDIDATE: SHAH HELI PARAGBHAI

COURSE OF STUDY AND SUBJECT:

Master Of Physiotherapy In Musculoskeletal (Orthopaedic) Science

ACCOMPLISHMENTS / CERTIFICATIONS:

Certification in Musculofascial Release Therapy

Certification in Basic Life Support (BLS) Training

Certification in Spinal Assessment And Radiology Workshop



Effect of Mitchell’s Relaxation and Progressive Relaxation Technique on Vital Parameters and Anxiety in Phase 1 Cardiac Rehabilitation – Prospective Randomized Controlled Trial



Siya Sakhardande

KLE Institute of Physiotherapy, Belagavi, India

Abstract

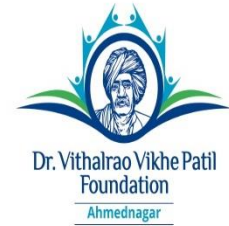
Relaxation techniques have exhibited immediate effects on pain intensity and vital parameters, also proved its efficiency in 2 week program. However, there is scarcity in literature regarding its effectiveness in 1 week intervention of Mitchell’s relaxation and progressive relaxation technique. Even with conclusive researches, there is dearth in literature regarding comparative effectiveness of Mitchell’s relaxation technique with progressive relaxation technique. The present study evaluates and compares the effectiveness of these two techniques on vital parameters and anxiety level in phase 1 cardiac rehabilitation. A study was conducted with 63 post-operative cardiac patients of all genders between the age group of 38 to 64 years that were randomly divided into three groups. Group A was administered Mitchell’s relaxation, Group B was administered progressive relaxation while Group C was administered conventional treatment. Participants in the Mitchell’s relaxation and Progressive relaxation group showed significant improvement in heart rate, respiratory rate, oxygen saturation and anxiety level whereas group C (control) had improvement only in oxygen saturation and anxiety level ($p < 0.05$). There was no significant difference in systolic and diastolic blood pressure in any group. The results showed there was no difference across groups ($p > 0.05$) and all groups had similar outcomes. We can conclude that Mitchell’s relaxation and Progressive relaxation techniques can be used as an alternative or adjunct in phase 1 cardiac rehabilitation. These techniques can be administered easily and practiced daily thereby improving overall well-being of an individual.

Biography

I would like to take this opportunity to introduce myself to you. My name is Siya Sakhardande, post graduate student of KLE Institute of Physiotherapy, pursuing Masters in Cardiovascular and Pulmonary Physiotherapy. My interest in patient’s well-being and health lead me to pursue 4 and ½ year course of Bachelors in Physiotherapy from the same institute. In the attempt to practice and learn new skills, I have attended additional 3 workshops and 2 national and international conferences. As an aspiring researcher, with a short research experience, I have one publication under my name in a Scopus Indexed Journal.



Effect of Inactivity on Daily Activity in the Lockdown Period of Covid19 Pandemic among the Young Urban Population - An Observational Study



Dr. Prachi Narkhede

Dr. Vithalrao Vikhe Patil Foundation's College of Physiotherapy, MUHS, India

Dr. Abhijit Diwate

Dr. Vithalrao Vikhe Patil Foundation's College of Physiotherapy, MUHS, India

Dr Archana Nagargoje

Dr. Vithalrao Vikhe Patil Foundation's College of Physiotherapy, MUHS, India

Abstract

As quarantine, isolation and social distancing have been implemented as a preventive measure for Covid - 19 spread the pace of life has reduced significantly for all walks of life. As a result, there has been an increase in inactivity. Purpose is to study the potential effect of lockdown during Covid – 19 pandemic on general, physical and emotional health. We conducted an Observational study on 101 young urban populations of age 20-30 years old, of which 34.7% graduate, 33.7% have jobs, or business and 31.7% are under graduate students The short form 36 is a patient-reported survey questionnaire, which was used to assess their health. The questionnaire was shared among the population using mobile applications like WhatsApp, Instagram, and Facebook for data collection. The current study shows that 40 – 50% of the healthy, young individuals show reduced energy level, reduced overall health and facing somewhat difficulty in accomplishing task as compared to previous year. Considering the changes occurring in daily lifestyle of the people due to COVID the after-effects are seen not only in the people affected by the virus but also in healthy individuals as a result of physical inactivity. Most of the subjects show mild to moderate difficulty while performing daily activities.



Biography

MPT¹, Dept. of Cardiovascular and Respiratory Physiotherapy, DVVPPF'S College of Physiotherapy, Ahmednagar, Maharashtra, India

Professor & HOD^{1*}, Dept. of Cardiovascular and Respiratory Physiotherapy, DVVPPF'S College of Physiotherapy, Ahmednagar, Maharashtra, India

Asst. Professor², Dept. of Cardiovascular and Respiratory Physiotherapy, DVVPPF'S College of Physiotherapy, Ahmednagar, Maharashtra, India



Cardiopulmonary Exercise Testing Response in Post-Covid-19 Patients Using 6-Minute Walk Test



Dr. Sheetal Bankar

MPT, Dept. of Cardiovascular and Respiratory Physiotherapy, DVVVPF'S College of Physiotherapy, Ahmednagar, Maharashtra, India.

Dr. Abhijit D. Diwate

Prof. & HOD, Dept. of Cardiovascular and Respiratory Physiotherapy, DVVVPF'S College of Physiotherapy, Ahmednagar, Maharashtra, India.

Dr. Archana Nagargoje

Asst. Professor, Dept. of Cardiovascular and Respiratory Physiotherapy, DVVVPF'S College of Physiotherapy, Ahmednagar, Maharashtra, India.

Abstract

It has been noted that there are many cardiopulmonary complications developed in post-COVID-19 patients. Besides these acute complications of infection, it might be linked with an elevated long-term cardiac risk. The study aims to evaluate the effect of cardiopulmonary exercise testing on vitals in post-COVID-19 patients using a 6-minute walk test. Initially, subjects were assessed for vital parameters [HR, RR, BP, SPO₂] and demographic data (age, weight, and height). A further 6-minute walk test (6-MWT) was performed by 13 patients including the age between 18 to 50 years and post-covid duration between 25th day to 6 months, following the standard 6-MWT guidelines. After completion of the test, vitals, and rate of perceived exertion (RPE) were re-assessed using the Modified-Borg scale. VO₂ peak and distance covered were estimated from the test after further analysis. After comparing pre-test and immediate post-test outcome values, a significant result was seen as there was an increased RPE, whereas VO₂ peak and distance covered were reduced. When mean scores were compared, RPE (Pre-test: 1.46 & post-test: 3.15) was increased by 55%. Estimated VO₂ peak (Predicted: 34.07 & performed: 19.31) was reduced by 48%, and distance covered (Predicted: 680.23 meters & performed: 224.23 meters) was reduced by 68% when compared to predicted values. No major changes were seen in the pre-test and post-test vitals. The functional capacity is reduced in post-COVID-19 patients after recovery from COVID-19 infection in terms of RPE, VO₂ peak, and distance covered. Where RPE was increased, and VO₂ peak & distance covered was decreased when compared to predicted values.



Impact of covid-19 Pandemic in Health Care Research Professionals in Accomplishing the Research Projects: A Cross Sectional Study



Karishma Kapur

MGM School of physiotherapy, Aurangabad, India

Abstract

Background: Research refers to a series of scientific research activities that sparkles basic reasoning and innovativeness, and makes it workable for students to start participating in scientific research. Incorporating research into educational program has been a rising pattern. Their is sudden change found in the normal working patterns With the discovery of the severe acute respiratory syndrome corona virus 2 (SARS-CoV-2) in late 2019 and very recently with the subsequent pandemic of COVID-19 many researches faced challenges and there was need to reframe the thesis which mainly focused the implications of the COVID 19. Mainly the challenge faced was working with the chosen methodology which includes the issues related with the data collection, avaiablility of the resources, high risk of the bias and lack of communication and infrastructure. Considering the present scenario to document the extent of variation A questionnaire was generated using a Google form which included some specific and structured questions in regards to the research experience before pandemic and during pandemic.

Results : The results of the observational study concluded that there was negative impact of Covid 19 pandemic in health care professionals.



Comparison of Whole Body Vibration and Percussive Gun on central obesity and body composition – A Randomized Controlled Trial



Chintamani Shrinivas Deshpande

KAHER institute of Physiotherapy, Belgavi, Karnataka, India

Abstract

Overweight is a public health problem having risk factor of cardiovascular and metabolic diseases. Vibration training became increasingly accessible and it exerts anabolic effect on skeleton. Percussive gun and Whole body vibration is a novel approach in the management of physiotherapy. There is paucity in the literature suggesting effect of percussive gun on spot reduction of abdominal fat. The aim of the present study is to compare effect of whole body vibration and percussive gun on central obesity and body composition. A Randomized controlled Trial was conducted on 42 participants. The participants were divided into 2 groups which are first Whole Body Vibration and second percussive gun. Along with the modality, conventional exercises were given for 3 sessions per week for 4 week and they were assessed for skinfold thickness, Body composition and waist circumference. Result and conclusion are awaited.

Biography

Chintamani Deshpande, 2nd MPT and Dr. Vijay Kage MPT, PhD Vice Principal and HOD of Department of Orthopedic Physiotherapy, KAHER institute of Physiotherapy, KLE DEEMED TO BE UNIVERSITY Belgavi, Karnataka. The research targets abdominal girth with use of novel instruments. Authors also interested in designing and developing various instruments to be used in physical therapy as well as using Artificial Intelligence in assessment and treatment of patients.



Awareness of Varicose Veins and Its Management among School Teachers



Nikita Jayaprakash

D. Y. Patil University School of Physiotherapy, India

Abstract

Teachers, compelled by the nature of their profession are required to fulfill various physical, vocational and intellectual demands. To accomplish daily goals, they are required to stand for a significant amount of time. Prolonged standing, being one of the risk factors for venous insufficiency, puts them at risk to develop varicose veins. Hence, there is an urgent need to educate and sensitize the teachers regarding the same. As patient education is a vital part of physiotherapy management, a study was carried out to evaluate the awareness regarding varicose veins and its available management in school teachers. A cross sectional, questionnaire-based study was carried out on 407 school teachers from Mumbai and Navi Mumbai using a self-made questionnaire. Sample population includes teachers with more than 3 years of work-experience. The questionnaire included demographic, occupational questions, questions based on awareness and management of varicose veins. Twenty seven percent of the teachers were found to be unaware about the condition and fifty percent of the teachers were found to be unaware of the management available for the condition. Due to high prevalence of varicose veins among teachers, it is necessary to spread awareness regarding the same as well as the available management and sensitize them with the methods to prevent the condition.

Biography

Nikita Jayaprakash is 23 years old and is currently working as an intern in D. Y. Patil University School Of Physiotherapy. She has completed her bachelors from the same university. She keeps a keen interest in Musculoskeletal Physiotherapy and Cardiopulmonary and Integumentary Physiotherapy.



Effect of tailor-made physical and dietary protocol for a young obese woman: a case study



Jui Phaltankar

MGM School of Physiotherapy, Aurangabad, India

Akanksha Shinde

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Saloni Shah

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Dr. Satyam Bhodaji

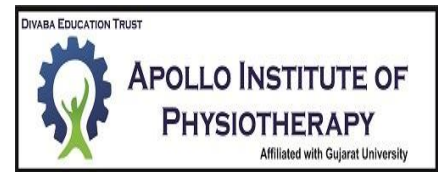
MGM School of Physiotherapy, Aurangabad, India

Abstract

Background: Obesity is a complicated condition which involves exorbitance of body fat. It's a medical problem that in most of the cases increases the risk of other diseases and health issues such as heart diseases, diabetes mellitus, high blood pressure. The aim was to find out the effectiveness of yoga, aerobic exercise and dietary modification in reducing obesity. Treatment
Method: A 19- year- old medical college girl demonstrated typical signs and symptoms of neck pain along with shortness of breath, and fatigue from past 2 months. She had reported history of PCOS with family history of obesity, diabetes type-2 and hypertension. On examination the patient had BMI level (39.5 obesity Class-II). The patient underwent 3-minute YMCA step test and body image questionnaire, caliper measurements, fatigue measuring scale. After the history and assessment, the treatment was initiated with dietary modification, yoga and aerobic exercise. Result and
Conclusion: After following the protocol patient had significant improvement in the pain, fatigue and weight reduction within three months of the protocol. Therefore, the present study tailor-made physical activity and dietary protocol was effective in improving subjects' quality of life.



Relationship between Sleep Quality and Performance of Physical Fitness among Collegiate Students: A Cross-Sectional Study



Jashrit Dubey

MPT student, Apollo Institute of Physiotherapy, Gujarat University, India.

Kairavi Trivedi

PhD Scholar, Assistant Professor, Apollo Institute of Physiotherapy, Gujarat University, India

Abstract

Introduction: Disruption of sleep pattern is one of the most important factors among college students recently. Due to the recent scenario, where students are studying online, they are also paying penalties on their physical fitness performance. The relationship between physical fitness performance and quality of sleep is one of the important aspects of health, however, it is not yet well understood. **Aim:** To study the relationship between quality of sleep and performance of physical fitness among college students. **Methods:** This study examined the relationship between sleep quality and physical fitness among college students. To assess sleep quality, Pittsburgh Sleep Quality Index (PSQI) was used. Physical fitness was assessed based on four components: body composition (body mass index [BMI], waist-to-height ratio [WHtR], and waist-to-hip ratio [WHR]), muscle strength and endurance (1-min bent-leg sit-up test [BS]), flexibility (sit-and-reach test [SR]) respectively and for cardiorespiratory endurance, Queen's College Step Test was used. **Result:** awaited.



Impact of Inpatient Based, Comprehensive Post Covid-19 Rehabilitation in a Tertiary Care Hospital



Dr. Komal Agarwal

MPT, AACVPR, Senior Team Leader and Cardiopulmonary Physiotherapy Specialist, Sakra World Hospital, Bangalore, India

Abstract

Post Covid-19 pulmonary complications are the leading cause of morbidity which put significant demands on social, economic and healthcare resources throughout the world. Interstitial pneumonia represented the most common cause of hospitalization for Covid-19 and it has been found that Covid-19 survivors have developed pulmonary fibrosis, restrictive lung abnormalities, associated with emotional and cognitive issues, exercise intolerance and dependency on daily activities. There is very limited information on the benefits of comprehensive rehabilitation in Post Covid-19 patients.

Through our retrospective observational study, we aimed to evaluate the pre post impact of comprehensive rehabilitation in 48 post Covid-19 patients. Inpatient based, multi-disciplinary rehabilitation interventions for around 240min/day comprised of training to enhance respiratory profile, functional activities and emotional health.

Specific outcome measures were used to assess the functional capacity, Upper limb endurance, Dyspnea, frailty, functional abilities, emotional aspects and overall health related quality of life. There was a significant improvement in all above mentioned components ($p < 0.01$) and no adverse responses were reported.

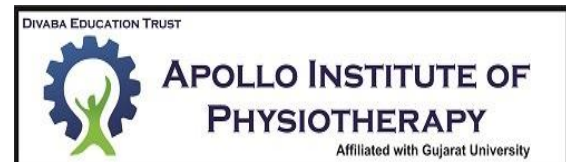
In conclusion, adults with Post Covid-19 sequel experienced significant improvement in the functional capacity and an early return to life. The results emphasize the important role of innovative rehabilitative strategies and a multi-disciplinary approach in post covid-19 care.

Keywords

Post Covid-19 sequel, Multi-disciplinary Rehabilitation, Quality of life, Frailty, Functional capacity, Anxiety



Immediate Effect of Buteyko Breathing Technique on VO_2 Max in College Students



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Bosky Mehta

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Abstract

Background: The physical activity of the college-going students is reduced due to online study during COVID -19 situation because of which their cardiorespiratory endurance has also decreased. Endurance depends on oxygen transportation, blood pumping and its regulation, and capacity of the system to extract muscular oxidative potential. Buteyko Breathing Technique's (BBT) main aim is to reduce the tendency to over breath or hyperventilate through control breathing and it is also termed as 'Reduce Breathing'. Buteyko Breathing Technique raises CO₂ levels which in turn reduces pulmonary ventilation which affects the delivery of O₂ to the tissue and cells. So, Buteyko Breathing Technique has been said at improving body oxygenation system. Purpose: To study the immediate effect of the Buteyko Breathing Technique on VO₂max college students. Methodology: The entire procedure was explained to the students between 19 to 25 years and written informed consent was obtained. Buteyko Breathing Technique was taught to the students and baseline data VO₂max through QUEEN'S COLLEGE STEP TEST was obtained as pre-test and post-test evaluation. Result: Awaited. Conclusion: Awaited



Comparison of Cognitive Impairments in Chronic Obstructive Pulmonary Disease and Healthy Subjects- Pilot Study



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Arora Puneet

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Abstract

Background: Chronic obstructive pulmonary disease (COPD) is a airway inflammatory disease characterized by largely irreversible airflow limitation which results in hypoxemia and hypercapnia. Hypoxemic insults and systemic inflammatory stress are particularly harmful to the central nervous system. According to literature COPD patients demonstrate sooner cognitive decline than expected.

Materials and Methods: We examined 16 COPD patients and age, gender and socioeconomic status matched 13 Healthy controls. All the subjects were then assessed for cognitive skills of orientation, attention, memory, visuo perceptual abilities and executive functions by MoCA and Trail making A and Trail making B.

Results: The mean age of the COPD (50.125 ± 5.11) and Healthy controls (50.61 ± 4.80). COPD has less MoCA score (22.37 ± 2.63) than Healthy controls (26.53 ± 1.71) with ($p < 0.001$).

TMT A score of COPD (64.68 ± 17.88) is also less than the Healthy controls (45.61 ± 16.84) and the TMT B score of COPD (133.25 ± 34.31) and Healthy controls (91.15 ± 34.97) is significantly less in COPD.

Conclusion: The preliminary result shows cognitive decline in COPD as compared to age matched Healthy controls.



Effects of Interval Training On Hba1c, Blood Glucose, and Cardiovascular Parameters in Type 2 Diabetes



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Abstract

Exercise training is an effective way to increase cardiorespiratory fitness and improve glycaemic factors, individuals with type 2 diabetes respond to exercise training with this expected adaptation. The study finds the effect of high-intensity interval training programs on glycaemic control and cardiovascular parameters for patients with Type 2 Diabetes. 26 participants with Type 2 Diabetes were included after the screening through selection criteria. Baseline assessment of each individual was measured. HbA1c, fasting plasma glucose, and postprandial plasma glucose was measured pre and post 6 weeks exercise program. Other outcomes were resting heart rate and blood pressure. Exercise training duration was for 30 minutes with short bouts of high intensity in intervals. There was a statistically significant difference between pre and post-exercise treatment in HbA1c (1.13 ± 0.12), fasting plasma glucose (35.73 ± 24.98), and postprandial plasma glucose (56 ± 20.5) with $P < 0.05$. In conclusion, 6 weeks of interval training was effective on glycaemic control and cardiovascular parameters in patients with type 2 diabetes.

Keywords

interval training, type 2 diabetes, HbA1c



Awareness and Knowledge of Cardiopulmonary Resuscitation (CPR) Among Physiotherapists in Clinical Practice- A Questionnaire Based Research



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Abstract

Background: CPR of excellent quality is critical for a patient's survival after a cardiac arrest. Because they may encounter emergency situations at work, healthcare professionals are expected to know how to perform CPR. Physiotherapists who use exercise as a therapeutic approach should have good knowledge and skills in CPR, not only to deal with potential adverse cardiac events during exercise, but also because widespread CPR use and early defibrillation can greatly reduce mortality due to heart attack.

Materials and Methods: The questionnaire used in the study was developed by Kamari KM et al. (1). As the questionnaire was developed according to the 2010 AHA guidelines, necessary corrections were done according to the 2020 AHA guidelines. The questionnaire was distributed via google forms using snowball sampling technique. Responses were collected and analyzed.

Results: A total of 400 physiotherapists were contacted for the questionnaire, out of which 204 therapists replied back and 3 did not give consent for the participation. Out of 200, 1 participant had poor knowledge about CPR (scored <40%), 28 had good knowledge (scored 40-60%), 167 had excellent knowledge (scored >60%), 2 participants achieved a complete score of 100%. We further analyze the excellent criteria, and found that 91 participants scored <75% and 76 participants scored >75%.

Conclusion: Awareness about CPR is good among practicing physiotherapists.



Knowledge and Awareness of Basic Life Support Among Physiotherapy Students in MGM College Aurangabad, India – An Observational Study



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Abstract

Background: Every medical student in India has to undergo a compulsory rotatory internship for completion of their course where they encounter various medical emergencies and apply their medical knowledge. An early encounter to a basic life support course and training will increase the efficacy of cardiopulmonary resuscitation and thus the outcome of the patient. This study was designed to test knowledge of Physiotherapy students in MGM College.

Method: This observational study was conducted in MGM College in Aurangabad and used a preformed validated questionnaire to test knowledge and awareness of basic life support and cardiopulmonary resuscitation in a sample of 100 Physiotherapy students.

Result: With a response rate of 65% among 100 Physiotherapy students, the maximum response was obtained from 4th year students. 95.4% of students were like-minded to participate in the cardiopulmonary resuscitation (CPR) awareness program. Only 28.1% of students correctly answered the order of CPR as C-A-B (chest compression-airway-breathing).

Conclusions: Although many of the students were aware of the basics of BLS, most students lacked knowledge on the critical aspects of BLS. Most students recognize the importance of BLS as a positive step taken in the college which is incorporated in the curriculum and would acquire the skills. Introducing a BLS course in medical students would improve the student's knowledge and contribute to improved survival rates of victims of out-of-hospital cardiac arrest.



Does Inclusion of Eccentric Training in Pulmonary Rehabilitation Provide Additional Benefits in Patients with COPD: A Systematic Review



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Abstract

Background: Chronic Obstructive Pulmonary Disease is a disorder complex having multifactorial effect on almost all systems of the body which results in diminished functional capacity (FC) and health related quality of life (HRQoL).

Aim: This review aims to systematically summarize the effect of eccentric training when performed in conjunction with pulmonary rehabilitation on Functional capacity and Health Related Quality of Life by the patients suffering from COPD.

Methods: A comprehensive search was conducted on electronic databases such as PubMed, Scopus and Web of Science from the point of inception till 30th November 2021. One reviewer screened the obtained results. The shortlisted full-text articles were then analyzed by the two reviewers. One reviewer extracted the data using Cochrane data extraction forms for RCT's and other analyzed the same. Risk of bias was assessed using Cochrane RoB2 tool.

Results: Three RCT's were included. Cohen's d was used to calculate the effect size from the post-interventional mean±SD. For both functional capacity and HRQoL effect size ranged from moderate to large, 0.31-0.92 and 0.74-1.04 respectively.

Conclusion: Eccentric exercise is an effective modality that can be used in conjunction with other components of pulmonary rehabilitation to have greater benefit in functional capacity and HRQoL.

Biography

I, Anandita Sharma a post graduate student pursuing Masters of Physiotherapy (Cardiopulmonary) at the Center of Physiotherapy and Rehabilitation Sciences department of Jamia Millia Islamia, New Delhi. I have completed my Bachelor's of Physiotherapy from Mother Teresa Saket college of



Physiotherapy, under Pandit Bhagwant Dayal Sharma university of Health sciences Rohtak and six months Internship from Army Hospital (Research and Referral), New Delhi. Dr. Aqsa Mujaddadi is an Assistant professor at Jamia Millia Islamia University (Pursuing PhD, MPT cardiopulmonary), having 17 citations under her name and an h-index of 2. Dr. Jamal Ali Moiz (PhD, MPT cardiopulmonary) is an assistant professor at Jamia Millia Islamia university, having 582 citations under his name and an h-index of 16.



Assessment of Cognitive Impairment in Hypertensive Patients and Its Correlation with Age of Onset and Duration of Hypertension



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Dr. Snehal Ghodey

Principal of MAEER'S Physiotherapy college, India

Abstract

Background: Hypertension is highly prevalent condition which has been established as a risk factor for cardiovascular and cerebrovascular disease. Hypertension is defined as persistent elevation of systolic arterial blood pressure above 140mmHg or diastolic blood pressure above 90 mmHg. Vascular dementia is a general term describing problems with reasoning, planning, judgment, memory and thought process caused by brain damage from impaired blood flow to your brain. Recent evidence suggest that hypertension may promote alterations in brain structure and function through a process of cerebral vessel remodeling, which can lead to disruption in cerebral auto regulation , reductions in cerebral perfusion and limit the brains ability to clear potentially harmful proteins such as β -amyloid.

Purpose: This study will help us to understand hypertension's role in the development and to correlate between cognitive impairment and age of onset, duration of hypertension in hypertensive patients. Hypertension is a modifiable risk factor, it represents a potentially important mechanism through which the prevention or delay of cognitive disorders may be possible.

Methodology: 86 subjects with hypertension will be evaluated using MMSE scale for cognitive decline. In this survey subjects are selected including Patient with HTN with history of at least 1 year and age ≥ 18 years of age. Subjects are excluded if patient presents confirmed dementia, Alzheimer disease, recent cardiovascular event (within previous 6 months), stroke, malignant tumors. Survey will be conducted using MMSE Scale on the interview basis which will be conducted



in person. Data will be collected and qualitative analysis will be done. RESULTS : Awaited
Conclusion: Awaited

Biography

I am Drashti Bhalani. I am currently an intern at MAEER'S Physiotherapy College in Talegaon Dabhade, Pune. I received a distinction in my first two years of B.P.Th. I am a freshman, and this is my first time presenting my research work. I am grateful for the opportunity to begin my research career.



A Survey of Musculoskeletal Health in Information Technology Professionals



Tetgure CHETANA

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Parle JYOTI

Community PT, HOD, Lokmanya Tilak College of Physiotherapy, India.

Abstract

India has been in the forefront in cyber world with information technology (IT) industry developing into a major service provider. Long working hours on computer, Static postures, poor office ergonomics, and repetitive nature of work were identified as some of risk factors leading affect musculoskeletal health of workers. So this study is aimed to find out the status of Musculoskeletal health among information technology professionals. A cross-section study were conducted , total 60 IT workers included in the study. Consent has been taken .In which 80% responded developed pain while working in this field , involving 30% neck pain ,29.3% upper back, 30% lower back .18% of participants responded “not at all” aware about condition and not taking any treatment. 22.7% participants were not performing any physical activity. This study concluded that the Musculoskeletal health status in information technology professionals is moderately affected.



Assessment of Power Grip In Relation to Different Wrist Positions among Different Age Groups of Women by an Electromyography”- A Comparative Study

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Abstract

Hand grip strength is a physiological variable that is affected by a number of factors including age, gender and body size different angle. Grip strength has been used to assess general strength in order to determine work capacity, for extent of injury and disease processes and the potential for progress in rehabilitation. The strength of a striated muscle contraction is directly proportional to the amount of electrical activity in the muscle. Zancolli (1979) their studied EMG to understand the muscle function. They reported that flexor digitorum superficialis is an active power movers while gripping sustained efforts are done. The handgrip strength test is a simple and economic test that gives practical information about muscle, nerve, bone, or joint disorders. Limited attempts had been made to find out the influence of the different wrist position in grip strength with EMG activity. In order to prove methodology clinically relevant, easy to perform and reliable. So the need for the study was to “find out the efficiency of power grip in relation with wrist in a various positions among the different age groups of women by taking the interference Pattern of flexor digitorum superficialis using computerized electromyography”. A comparative descriptive study where total of 50 subjects were selected for the study. Test sample consisted of 25 women volunteers in between the age groups of 20-25years. These groups consider as a group A The other test sample consisted of 25 healthy women in age between of 40-45 years and this group considered as a group B Group A and group B were equally assessed power grip in relation to wrist in a four various positions and measured the interference Pattern of flexor digitorum superficialis muscle. The EMG interference pattern of FDS was considered as a parameter to measure the efficiency of grip strength wrist in various positions of group A & B. The study concludes that the maximum interference pattern of power grip strength had significant decline in percentage from 300 Extension & 00 radioulnar deviation, 00 extension & 00 radioulnar deviation, 300 extension & 150 deviation in both the age group of 20-25 & 40-45 yrs. A compared age influence on power grip strength between group A & B also resulted in greater interference pattern at wrist in 300 EXT and 00 Radioulnar deviation.



Impact of Mental, Physical, Social and Professional Health on Working Population: A Cross Sectional Servey



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Dr. Satyam B

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Abstract

Introduction: Well-being of professionals is very important for work out come that includes physical health, mental health, social health and professional health perception. The aim of the study was to develop a valid and reliable short self-assessment of scale of well-being a d to evaluate physical health, mental health, social health and professional health on working population.

Aim and objective: to access the impact of overall health on working population using self-assessment questionnaire of well-being

Methodology: It was a cross-sectional study done on population living in Maharashtra for development of the short self-assessment questionnaire of well-being. Total number of participants was 289(18years to 75 years) both male and female. pilot study was done on web-based questionnaire, web links was sent by different modes of communication (WhatsApp, email and other social links) In each component of physical health, mental health, social health and professional health workers 6 different question was asked which was rated on 0 to 10 scale rating. Response were collected by using binary logistical regression p value less than 0.05 was marked as significant statistically analysis was done using SPSS version 24.0.

Result and conclusion: According to therapist validity of the study 0.9689505. Among 289 sample size of population mental health-52%, physical health-54%, social health-57%, physical health-39% was seen to be affected among the working population of Maharashtra



Prevalence of Gestational Diabetes Mellitus & Associated Risk Factors in Women at Tertiary Care Hospital- A Retrospective Study



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Abstract

To investigate the risk factors for Gestational Diabetes Mellitus among women admitted in tertiary care hospital. The prevalence of gestational diabetes mellitus (GDM) in India varies from 3.8 to 21%, depending on geographical location, dietary habits, and socio-economic status. This study was undertaken to determine the prevalence of gestational diabetes mellitus (GDM) and risk factors associated with it. GDM not only influences immediate maternal causes as preeclampsia, stillbirths, macrosomia and neonatal outcomes as hypoglycemia, respiratory distress, but also increases the risk of future Type 2 diabetes in mother as well as the baby. Women having gestational diabetes in the age group of 20 to 39 years were recruited from year 2019 to 2021 from gynecology ward of tertiary care hospital. Data was analyzed using standard descriptive statistics. The results indicated a significant association between age group of the mother and the prevalence of Gestational Diabetes Mellitus. Maximum prevalence was found in the age group between 20 to 24 years and the overall prevalence of GDM is 2%. In this study, considerable variation was found in the prevalence of gestational diabetes and its associated risk factors in pregnant women in relation to the age of the mother.

Biography

I would like to take this opportunity to introduce myself to you. My name is Mrunmayi Gadre, 2nd year post graduate student, pursuing specialty in Pediatric Physiotherapy at KLE Institute of Physiotherapy College. Since forever my captivation with the body and understanding its function has fueled my desire to pursue Physiotherapy as profession, which in turn this aspiration has helped me to complete my bachelor's degree with 65%. I have participated in many marathons and conferences as well as appeared for additional workshop and secured certificate entitled as "Certified Kinesiology Taping Therapist". Currently as a post graduate student working in 2 research projects.



Interlinking Between Awareness of Menstrual Hygiene Practice, Quality Of Life and Its Associated Factors amongst Physically Disabled Females in Aurangabad District, India- A Cross Sectional Study



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Abstract

Introduction: Females with disabilities experience inconvenience to a certain degree in the quality of life they live. An even greater challenge is faced by the females with disabilities while managing their menstrual hygiene and health with dignity and safety due to the double stigma faced by social norms around gender and menstruation and having a disability. Therefore disability becomes vulnerable to face considerable challenges on a daily basis to manage their menstrual health and hygiene.

Aim of the study: To determine Correlation between Awareness of Menstrual Hygiene Practice and Quality of Life amongst disabled females in Aurangabad district, India.

Methodology: A total of 31 participants were recruited in this cross-sectional correlation study. The participants were physically disabled females between 11-45 years of age experiences menstruation. The participants who did not experience menarche and those with known active cases of infectious disease were excluded. The outcome measures used were Menstrual Practice Needs Scale (MPNS-36) and World Health Organization Quality of Life questionnaire (WHOQOL) was done.

Results: The present study showed significant correlation between awareness of Menstrual Hygiene Practice with Age with p value ($p < 0.05$). The Karl Pearson Correlation Analysis showed significant correlation between MPNS-36 scale and WHOQOL scale. ($P < 0.05$). It indicates a strong positive correlation between Menstrual Hygiene Practice and WHOQOL scale.

Conclusion: Issues related to awareness of Menstrual Hygiene Practice for people with disabilities is more complex as Physical health, psychological, social relationships and environmental factors was significant due to the additional disability discrimination and impairment experienced.



Keywords

Physical Disability, Menstrual Practice Need Scale, Quality Of Life, Associated Factors.



Prevalence of Dysmenorrhea and Associated Symptoms among Adolescent Girls: A Cross Sectional Study



Shaily Hemant Parekh

Parul institute of physiotherapy, India

Abstract

Introduction: women health disorders are very commonly seen in an individual. Dysmenorrhea is also one of the health problems that are widely seen every year in young females. This study is done to find out the prevalence of dysmenorrhea and its effects on work as well as social performance and its co relation to absenteeism among the young females of Parul University.

Methods: total number of young females of Parul University were analysed and questionnaire will be used to collect information about premenstrual pain in young females of Parul university of Vadodara city.

Results: total 100 participants were included in the study. The results suggested students suffered from difficulty in concentration-50.53% and 7.62% suffered from mood swings during their menstrual cycle. 43.81% of the population always having generalised body pain during menstrual cycle phase. While 42.86% of population had suffered from impaired work performance during menstrual cycle phase.

Conclusion: from the outcome of this study, it was concluded that there is high prevalence of premenstrual pain among young females of Parul University.

Keywords

dysmenorrhea, symptoms, young female, absenteeism , social performance.

Biography

Name: Shaily Hemant Parekh

College: Parul institute of physiotherapy

Course: doing masters in community physiotherapy

Did my bachelors from Saurashtra University and did my compulsory internship rotation from SSG hospital and have worked as an observer ship in Well-care orthopaedic hospital



Effect of MT2 Blade Soft Tissue Mobilization Modified Neck and Dissection for Head and Neck Carcinoma



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Abstract

Background: Trismus, or restricted mouth opening, is a common side effect of treatment for head and neck cancer. Trismus leads to several difficulties to the patients, like inability to open jaw while eating food, speaking, yawning. The patient usually Complains of pain & tenderness in the face, more in the area in front of the ear, increases while Attempting to open the jaw, trying to eat food especially solid food. Physiotherapy plays an important role As a treatment of trismus. A 40 year-old Male with trismus was assessed using dial calliper for mouth opening and was treated using Physiotherapeutic approaches. Pre- and post intervention values were recorded. Physiotherapy interventions Included hot moist pack therapy, myofascial release, exercises for the temporomandibular joint (TMJ)Results: The results of this study indicated that after 20 days of physiotherapy treatment program the mouth opening increased significantly and there was reduction in VAS score in patients with trismus. The increase in mouth opening seems to be greater in the patient who was young in comparison with the two patients who were older. Conclusion: The present report emphasis on the Effect of 2 weeks of physiotherapy intervention using a combination of electrotherapy and exercise has Benefited the patient in improving the mouth opening and overall quality of life.



Quality of Life in Post-Operative Head and Neck Cancer Patients-A Longitudinal Study



Gayatri Landge

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Abstract

Approximately 6,50,000 new cases of Head and Neck cancer are diagnosed each year worldwide and they occupy one third of the total cancer burden in India. Most patients with Head and Neck cancer receive combination therapies such as chemotherapy, radiation therapy &/or surgery. These treatments may have significant impact on patient's personality and body image negatively affecting the Quality of Life. Hence the present study aims to determine the long term quality of life in postoperative head and neck cancer patients and also the secondary objective of the study is to determine fatigue and pain levels of postoperative head and neck cancer patients as these two factors may be considered as a contributing factors for changing quality of life of a patient. Total 28 patients of head and neck cancer between the age group of 18-75 years, who had been admitted after undergoing the surgical treatment for the same were selected. Both male and female participants had been selected for the study, with or without other cancer treatments like radiation therapy or chemotherapy. Participants were assessed at four different points of time with the help of Functional Assessment of Cancer Therapy-Head & Neck (FACT-H&N) Questionnaire for determining their quality of life. Multidimensional Fatigue Inventory (MFI) and Short Form-McGill Pain Questionnaire-2 (SF-MPQ-2) were used for measuring level of fatigue and pain of the participants respectively. All domains of the FACT-H&N Questionnaire showed significant improvement at 3 month follow up with $p \leq 0.05$. An improvement was also noted in SF-MPQ-2 total score ($p=0.001$) and in MFI scores ($p=0.001$) after 3 months. Hence the study concluded that the quality of life as well as pain and fatigue levels of head and neck cancer patients shows a gradual improvement in following 3 months after surgical treatment.

Biography

I would like to take this opportunity to introduce myself to you. My name is Gayatri Landge, 2nd year post graduate student, pursuing specialty in Oncology Physiotherapy at KLE Institute of Physiotherapy College. Human body and its functions were always my topics of interest but as I progressed with my bachelor degree my interests grieve stronger for cancer patients and their rehabilitation therefore I choose this filed to perceive my post graduation degree. I have



participated in many conferences as well as appeared for additional workshop and secured certificate entitled as “Certified Kinesiology Taping Therapist” and “Certified Advanced MFR therapist” .Currently as a post graduate student working in 2 research projects.



Self Assessed Geriatric Questionnaire



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Abstract

Introduction: Perceived health is a combined term which includes Physical, social, mental, professional health, personal hygiene, dependence, pain and disability. Geriatric population is increasing rapidly and has impact on economy of every nation; therefore, it is essential to include Geriatric perception on the health. The present study aims to develop a newly designed Questionnaire on perceived health of geriatric population.

Method and statistical analysis: The newly designed Questionnaire was developed by 7 step method for Medical education research. Reliability and validity was defined and perceived health of geriatric population was evaluated by statistical analysis after collecting the survey data done through the goggle form circulated on all social media for the geriatric population that can feel the online forms. Total 489 subjects (age 60-80 years) participated in google survey on social media throughout Maharashtra.

Result: Cronbach's alpha coefficient was used for determining overall reliability i.e. 0.90 suggesting a good score. The content validity was based upon right words, grammar, importance of question, sequencing of questions.

Conclusion: The newly formed scale was found to be reliable and valid. It can be used further for geriatric health related topics.



Psychological Effects of Lockdown in Geriatric Population and Their Coping Strategies



Shreya Yogesh Pai

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Abstract

Geriatric population is a more vulnerable age group that is often neglected. This population is not as aware of the mental disorders, especially in India, where talking about mental health is considered taboo. During this pandemic, as we have all been asked to self-isolate, the feelings of uncertainty and stress have surfaced and escalated significantly in the geriatric population. With little to no social interaction, they often end up being trapped inside their own minds, haunted by their own misgivings without anyone to express these thoughts to. This further causes lack of sleep, generalized fatigue from overthinking and catastrophizing situations often, neither of which is good for their physical or mental health. A cross sectional study was performed for four months with a sample size of 115. The main rationale of this study was to assess the depression, anxiety and stress levels in the sample population using DASS-42 scale along with their coping mechanisms using the COPE Inventory. It was seen that some part of the geriatric population had suffered from depression, anxiety and stress during the lockdown. The coping strategies assessed proved that a major part of the sample population had poor resilience and they found solace in spirituality and religion. Quite a few people faced their problems head on and turned to friends for support. It was also noteworthy that a minimal population turned to substance abuse. It was proved that the lockdown due to the pandemic had a psychological impact on the geriatric population.

Biography

Shreya Pai is 22 years old and is currently working as an intern at D.Y. Patil Deemed to be University, School of Physiotherapy. She has completed her bachelors from the same university. She has an interest in the fields of Neurosciences and Cardiopulmonary & Integumentary Physiotherapy. Her other interests include reading, drawing and knitting



Impact of Second Wave of Covid-19 Pandemic on Sleep Quality and Menstrual Health among 18-45 Years of Females - A Cross-Sectional Study



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Abstract

Background: Women of reproductive age are one of the widely affected population groups during pandemic. We, therefore, performed a cross-sectional study among this population group considering the two major factors responsible for the wellbeing of a woman that is Sleep Quality and Menstrual Health throughout the course of the second wave of COVID-19.

Objective: The study was conducted to investigate the effect of the second wave of COVID-19 on sleep quality and menstrual health in women aged 18-45. To study the effect on menstrual health of women during the second wave. To compare the sleep quality of women during and after the second wave. To investigate the correlation between sleep quality and menstrual health of women between the age of 18-45 during the second wave of COVID-19 pandemic.



Methodology: A digital survey was shared via an online platform using Google forms in January 2022 for 21 days. Women of age 18-45 were invited to complete the survey. The results were calculated by Chi-square value method.

Results: The survey was completed by 150 women. 42(28%) of women experienced overall changes in their menstrual cycle during the second wave of COVID-19. Women who experienced changes in sleep quality during and after the second wave are 45/30% and 38(25.3%), respectively. There is a significant correlation between overall changes in the menstrual cycle and sleep quality during second wave of COVID-19 pandemic ($p=0.009$).

Conclusion: The second wave of COVID-19 pandemic had a considerable effect on the Sleep Quality and Menstrual Health of women between the age 18-45. The results of our study indicated that poor sleep quality has a significant impact on menstrual health during second wave of COVID-19.

Keywords

sleep quality, menstrual health, second wave of COVID-19 pandemic.



Rehabilitation Structure and Mechanism for Substance Use Disorder Patients in India



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Abstract

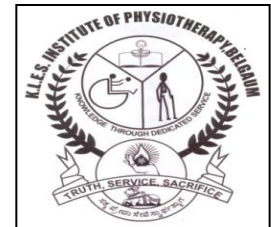
Substance abuse refers to the harmful or hazardous use of psychoactive substances, including Alcohol and illicit drugs. The use of psychoactive substances causes significant health and social problems for those who use them and others in their families and communities. The treatment and rehabilitation of drug addicts are still in developing stage in India. These rehabilitation institutions are functioning under the guidelines and rules provided by Narcotic Drugs and Psychotropic Substances Act. Presently, various rehabilitation centers are serving with the support of central and state governments. From time to time, evaluation of these centers is necessary to know the ground-level reality of the working system. This study reviews the current literature on substance use disorder treatment and rehabilitation systems. The study has also discussed the information collected from the Central and State offices and portals about rehabilitation functioning. It is observed that the current literature is unable to comprehensively explain the rehabilitation structure. However, the current research highlights some important areas, which can serve as a guide for future research and program development. In light of the evident need for treatment of substance use disorder in developing countries, future research would do well to blend inquiry with practice. Although further investigation is needed to fully understand the specific needs of developing world populations, assisting those populations should be a primary goal.

Key Words

Rehabilitation, De-addiction, Treatment, Substance, Disorder



Health Status of Personnel Working At Petrol Station- A WHO STEP Survey in Belagavi City



Tejaswi Varute

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Abstract

Background- The burden of non-communicable diseases (NCD) is increasing day by day in India. Biological and behavioural risk factors predispose to the development of NCDs. Petrol station attendants continuously come in contact with (BTEX) compounds which are harmful to health. This study aims to evaluate health status and correlate risk factors for NCD in petrol station attendants using WHO STEP tool.

Methodology- 102 participants from 28 petrol stations of belagavi city in age group 18-65 working at a petrol station for more than 6 months were included in the study.

Results- Maximum participants had moderate intensity activity on 6.57 days/week, diet was noted to be inadequate in maximum participants, 23% consumed alcohol and smoked tobacco. An increasing trend was seen in no. years worked with elevated blood pressure and 32% were pre-diabetic. There was positive correlation between no. of years worked with BMI, blood pressure and random blood sugar.

Conclusion- High prevalence of NCD risk factors was observed among petrol station attendants that needs to be addressed through a comprehensive approach with due emphasis on preventive care in order to make healthy living a social norm and improve quality of life

Keywords

petrol station attendants, WHO STEPS survey, non-communicable diseases, risk factors, blood pressure, diabetes.

Biography

I'm Tejaswi Varute presently pursuing Final year of Masters in Community Physiotherapy and rehabilitation from KAHER Institute of Physiotherapy. I Completed my under graduation from the same institution in the year 2020.



Impact of COVID-19 on Pregnancy and Maternal Health



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Abstract

The current pandemic caused by the novel corona virus disease 2019 (covid-19) is spreading at an accelerated rate globally .Several physiological and immunological changes occur in women during pregnancy .These changes may predispose pregnant women towards significant health complications from respiratory infections , such as an increased risk of miscarriage ,preterm birth or even fetal mortality .Various immunological changes have recently been found to occur during pregnancy ,which therefore , increase the susceptibility of pregnant women to certain intra cellular pathogens ,such as COVID-19.The clinical manifestations of COVID-19 among pregnant women have been characterized by mild and sometimes severe upper respiratory tract symptoms however ,another study reported that most pregnant women with COVID-19 were asymptomatic upon admission to hospital, and none experienced any severe respiratory failure during their hospital stay.This suggest that different stages of pregnancy and different immune responses in each case may affect the presenting symptoms of COVID-19 in pregnant women .Vertical transmission of COVID-19 from mother to child is a concern ,as such transmission could endanger a child .Three mechanisms of vertical transmission have been suggested :intrauterine transmission ,placental blood transmission and intrapartum transmission .This review discusses the impact and pathogenicity of COVID-19 on the well being of pregnant women ,both the clinical aspects and diagnostic, therapeutic options. Despite the ability of COVID-19 to vertically transmit from infected mother to child and its presence in the breast milk of infected women ,special precautions are always required to minimize the cross - infection from sourrounding people , such as relatives , friend and health care provider.



Correlation between Depression, Anxiety and Stress with Quality Of Life among Postmenopausal Women



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Dr. Dhara Vaghela

Shree Swaminarayan Physiotherapy College, Ranip, Ahmedabad, India

Abstract

Background: Women are the center of the family and have the main role for healthy living. Menopause is the onset of aging in women. It's a critical phase in their life. During this process, they experience climacteric symptoms which include physical changes like hot flushes, sweating, sleep disorders, fatigue, sexual dysfunction as well as psychological changes, such as tension, irritability, mood changes. All of these may affect their quality of life and sense of well-being. Through this study, we can obtain a more realistic portrayal of individuals' emotions, areas of difficulty in understanding their needs and distribution of health care.

Purpose: To correlate depression, anxiety and stress with quality of life among postmenopausal women.

Method: An ethical clearance was done by the ethical committee of our institute. 'N' numbers of participants will be taken out according to inclusion criteria. An informed consent will be taken from the participants. Depression, Anxiety and Stress Scale (DASS 21) and Menopause specific Quality of life (MENQOL) questionnaire will be used to determine the study components.

Result: Awaited

Conclusion: Awaited

Keywords

Post-menopausal women, Depression, Anxiety, Stress, Quality of life.

Biography

Name of the candidate: Makwana Jagruti Rameshbhai.

Course of study and Subject: Master of Physiotherapy in Community Health and Rehabilitation

Accomplishment/Certificates:

Certified in Myofascial Release Technique (advanced soft tissue manipulation).

Certified in Swiss Ball Therapy in Physiotherapy.



Association between Hand Grip Strength and Depression in Patients Undergoing Cancer Treatment -Observational Study



Master Rushil Deepak Tanna

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Abstract

With the increasing incidence of cancer there is an improvement in the diagnostic and therapeutic techniques, the survival rate of cancer patients is increasing. As the survival and the life expectancy of patients with cancer have increased, health-related quality of life (HRQOL) has become an important outcome measure. The poor quality of life of cancer patients is probably due to cancer itself and/or side effects of cancer treatments. Patients with cancer are more likely to develop depression than the general population, which negatively impacts their quality of life (QOL) and prognosis. Hand grip strength (HGS) is a simple, fast and reliable method for evaluating maximum voluntary squeezing force. HGS is one of the promising tools for the brief evaluation of physical function. So, the current study aims to determine the association between hand-grip strength and depressive symptoms. Study consisted of 103 patients diagnosed with cancer who were undergoing either chemotherapy or radiation therapy or both or had undergone surgery. Both male and female participants within the age group of 18-75 years were included for the study. Patients were assessed using a Camry electronic hand dynamometer, Zung self-rating depression scale and PHQ-9 Patient depression questionnaire for determining the HGS and depression respectively. FACT-G & EORTC QLQ-C30 was used for measuring quality of life of the participants. The results and the conclusion of the study are awaited.

Keywords

cancer, hand grip Strength, depression, quality of life, physical function

Biography

I, Rushil Tanna, a Post-Graduate candidate at KLE institute of Physiotherapy with an elective of Oncology. I am currently working on 2 research project in the field of oncology .With a keen interest of knowing and learning more about cancer I have started this journey which is off-beat in our field of physiotherapy but will soon play a very integral part in all oncology set-up, including some major set-up which already have specialized physio's working .I would be happy to grab this opportunity and throw some light on the importance of oncology rehabilitation by presenting one of my ongoing research.



Correlation of Mild Cognitive Impairment with Static Balance and Dynamic Balance in Geriatric Population. A Pilot Study



RUTUJA Ghag

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Dr.SAYLI Paldhikar

H.O.D. of neurophysiotherapy department, MAEER's physiotherapy college, India

Dr. SNEHAL Ghodey

Principal of MAAER's physiotherapy college, India

Abstract

Background: Cognitive changes occur during the normal course of ageing. Balance is one important function that deteriorates along the natural ageing process which increases the prevalence of falls in the geriatric population. The global cognitive function is associated with balance and such association is moderated by strength of lower limb.

Purpose: The need of screening geriatric population has gained importance as cognitive impairment and balance impairments are common in the natural course of ageing. Mild cognitive impairment goes undetected which can further lead to Dementia. The onset of mild cognitive impairment could also be further correlated with balance impairments and the risk of fall can be reduced if preventive physical therapy is started early.

Methodology: A group of 15 subjects with MCI were taken in the study. Cognition was assessed through MoCA scale which covers all the domains of cognition. Static balance was assessed through Single limb stance test and dynamic balance was assessed through DGI. Inclusion criteria included individuals with MOCA score less than 26.

Results: Awaited C

Conclusion: Awaited

Biography

My name is Rutuja Ghag and I am an intern at MAEER's physiotherapy college, Talegaon Dabhade. This is my first paper presentation. I have great interest in the subject of neurophysiotherapy and intend to learn more about the current research trend in the same.



Key Factors Associated with Adherence to Home-Based Exercise Program: A Literature Review



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MPT Neurological Sciences, Department of Physiotherapy, Ashok & Rita Patel Institute of Physiotherapy, CHARUSAT, India

Soni M

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Abstract

Home-based physical therapy is essential for optimizing the effectiveness and success of physiotherapy. Majority of patients report that they cannot exercise at home and there is a lack of adherence to home-based exercise program. Understanding factors that influence patients' adherence with home-based physical therapy might help practitioners support improved adherence. Therefore, the purpose of this review is to determine all relevant factors that could influence adherence to home-based exercise program. A literature search was performed in CINHALL, MEDLINE and PEDro databases. The following search categories were used: "physiotherapy", "home-based exercises", "home exercise program", "home-based physical therapy", "adherence", "effectiveness", "facilitators", and "barriers". A total of 44 studies were identified and title and abstract analysis was performed and 10 relevant studies were included for further analysis. The following factors were found to influence adherence to home-based exercise programs are: self-motivation, self-efficacy, locus of control, perceptions about physical therapy, their previous experience of an exercise program, participants' active role in the rehabilitation, psychological influences such as depression and anxiety, stress and coping strategies, social support, time constraints, physical environment. Even exercise prescription, patient-therapist communication and some cultural-specific factors such as opting for folk medicine over rehabilitation and social stigma were also found to influence adherence. In this review several factors have been identified that appear to affect patients' adherence to their home-based exercise program. Therapists should emphasize more on reported findings and incorporate them into management strategies to increase adherence to home-based exercise program. This study can lead to the development of effective interventions for promoting adherence to home-based exercise program.



Biography

I am Ms. Jignasha Gohil and I am pursuing a Masters in Physiotherapy in Neurological Sciences at Ashok & Rita Patel Institute of Physiotherapy, CHARUSAT, Gujarat. I have completed my bachelor's degree from Shrimad Rajchandra College of Physiotherapy, Uka Tarsadia University, Bardoli. My area of interest is patient satisfaction and exercise adherence. I have given a presentation at an e-symposium titled Key Determinants of Learning Motor Behavior, available on YouTube. A presentation I did on "Effects of neuromuscular electrical stimulation in Neurorehabilitation" was part of a faculty-student collaborative symposium titled "Technology-Based Interventions in Neurorehabilitation: An evidence-based update".



Association between Hand Grip Strength, Functional Status, Fatigue and Quality Of Life in Gastrointestinal Cancer Survivors-An Observational Study



Vidhi Joshi

KLE Academy of Higher Education and Research, India

Abstract

GI tract cancer is a combined term used to describe cancers that affect the digestive system. Majority of survivors undergo treatment such as surgery, chemoradiotherapy as part of cancer regimen. Incidence have been on rise and evidences shown earlier have found low poor muscle mass, functional status and quality of life. There is dearth of literature in relationship between the handgrip strength, functional status, fatigue and quality of life which may add on to nutritional status of GI cancer survivor. Hence this study aims to find relationship between hand grip strength, functional status, fatigue and quality of life in GI cancer survivor. 67 patients of Gastrointestinal cancer were selected who had been admitted and undergoing the surgical and chemoradiotherapy treatment for the same. Both male and female participants within the age group of 18-65 years had been selected for the study. Participants were assessed for hand grip strength by dynamometer, 6min walk test, FACT-F for fatigue and FACT-GA for quality of life. The results had shown significance that is $p < 0.05$. An association was noted in handgrip strength with fatigue (0.0206) and also with the quality of life in the domains of the social (0.0033) and emotional well-being (0.0050). Hence the study concluded that quality of life and fatigue can be associated with the handgrip strength in patients with gastrointestinal cancer survivors.

Biography

I would like to take this opportunity to introduce myself. My name is Vidhi Joshi, currently pursuing my degree in MPT 2nd year in Oncology Physiotherapy at KLE Institute of Physiotherapy College. It's a new on growing field and I would like to contribute by enhancing the knowledge of cancer rehabilitation. I have been working on 2 projects in my master's degree and have published on article during my internship. Have completed my Under Graduation from KLE Institute of Physiotherapy College.



Effect of Pilates Tele-Rehabilitation Therapy in Female's Having Urinary Incontinence with Low Back Pain: A Randomized Control Trial



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Ummey Aimen Siddiqui

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Dr. Satyam Bhodaji

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Abstract

Background: Studies have shown most commonly urinary incontinence is interrelated with the low backache in women. Efforts are being made to find convenient treatment for urinary incontinence correlated with back pain. Therefore, during the times of pandemic our study was aimed to see the effects of Pilates training in women having urinary incontinence with low backache using tele-rehabilitation mode of treatment.

Objectives: To study the effect of Pilates & basic conservative physiotherapy & compare both the studies for the treatment of females having urinary incontinence with low back pain.

Methods: The study was done in Aurangabad including 30 women's with their consent. Study included 17 to 30 years of age females. These Women were randomized into two equal groups (of 15 each) receiving two different exercises Pilates for group A & conventional exercises for group B. Both the groups was provided with a video recording of the consecutive exercises & the procedures, all norms, conditions were explained to each individual using telecom. The regular follow-up & observation of exercises were taken of each individual using the telecom after every 2 days. VAS, Bladder diary, King's Health Questionnaire were used to assess the outcome after every 15 days.

Results: Group A under Pilates exercises were observed to have high Values of the difference between preterm & post-term evaluation. The effect size or Cohens D indicates the value of VAS 4.91, bladder diary 1.04, king's score 7.22 of group A. Comparatively the effect size or Cohens D



indicates the value of VAS 3.26, bladder diary 0.79, king's score 8.83 of group B. So, it can be concluded group A is more effective than Group B under conservative physiotherapy.

Conclusion: It was statistically seen that Group A Pilates exercise is better than Group B conventional exercises.



Role of Manual therapy for Neck Pain and Quality of Life in Head and Neck Cancer Survivors: A Systematic Review



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Abstract

Pain is the one the most dreadful side effects of head and neck cancers and cancer related treatments affecting patients during and after the treatment adding to the problems affecting their ability to speak, swallow, breath and feeding. Manual therapy is standard set of physiotherapy treatments used for alleviating neck pain. It has found to be effective in small subset of cancer patients for relieving pain. Electronic search was conducted in PubMed, Google Scholar, CINAHL, Pedro, and COCHRANE databases. Reference lists of the included studies and relevant reviews were manually searched. Studies that met the inclusion criteria were evaluated using McMaster critical review form for quantitative studies. A descriptive synthesis was undertaken due to the heterogeneity of the included studies. Seven studies were assessed for risk of bias that comprised of three clinical trials, one case series and three case reports that applied Maitland's mobilisation, Myofascial release, Muscle Energy Techniques to head and neck cancer survivors in various clinical settings. The outcomes highlighted decrease in pain, improvement in cervical range of motion and quality of life. This review recommends application of manual therapy to head and neck cancer survivors. However, authors caution application of manual therapy in terms of choosing a particular technique and its application. Further, well designed larger sample size with randomisation and double blinding would help to generate better evidence for head and neck cancer survivors.

Biography

I would like to take this opportunity to introduce myself. My name is Sayali N Patil, currently pursuing my degree in MPT 2nd year in Oncology Physiotherapy at KAHER Institute of Physiotherapy Belagavi. It's a new growing field and I would like to contribute by adding the knowledge of application of various physiotherapeutic techniques focusing on manual therapy and its role in different stages of cancer rehabilitation. I am currently working on 2 research projects in my master's degree.



A Survey Study on Menstrual Cycle Changes during Covid 19 Pandemic among Women in Mumbai



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Trupti Deshmukh

Neuroscience PT, Assistant professor, Lokmanya Tilak College of Physiotherapy, India.

Abstract

The covid -19 pandemic has affected the lives of the global population. Stress and lifestyle changes during this period has affected women's in many aspects. Even outside the contest of covid 19, very few studies focused on female's menstrual health during this pandemic. Therefore, this study was conducted to understand the menstrual cycle changes during covid 19 pandemic in Mumbai. A cross sectional online survey using self-made questionnaire was conducted during covid 19 pandemic. Questions related to pre and post pandemic changes in Menstrual interval ,length, type, flow, volume, symptoms were added. A total 250 women with age group 20-45 were included in study. Result shows that there were 36% increase in interval ,14% in length, 14% increase in irregularities, ,20% in flow, 20% volume. Mood swings and stress were most commonly seen symptoms post covid. Study concluded that significant changes occurred in Menstrual cycle characteristics during covid 19 pandemic. Education about physical exercise and psychological counseling will benefit women's to overcome menstrual changes during pandemic.



Understanding Expectations and Identifying Emerging Challenges Faced By Telerehabilitation Practicing Physiotherapists : A Survey Based Study



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Abstract

The covid-19 outbreak caused by SARS- CoV-2, has posed a big challenge to physiotherapists practice, especially regarding the contact level with patients. Telerehabilitation is the delivery of rehabilitation services over telecommunication networks and the internet. Therefore the study has been conducted to understand their expectations, to identify the emerging challenges faced by telerehabilitation practicing physiotherapists and to study the challenges faced by them in different age group of physiotherapists . A survey based , convenient sampling method was adopted which included, Bachelors/ Masters/ PhD level therapists practicing in different setups. Till date a total of 35 physiotherapists (83% female, 17% Male) have responded (37% Mpth, 60% Bpth, 3% PhD) with majority of 0-5 years experience and freelancers. More than 50% of the physiotherapists have expectations regarding telerehabilitation and they have faced certain challenges during telerehabilitation. Therefore we conclude that they have certain expectations and have faced challenges during telerehabilitation and mostly older age groups have faced more challenge during telerehabilitaion.



**Knowledge and Competence of Community Health Officers
(CHO) Regarding Management of Non-Communicable
Diseases (NCD's)**



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Prof (Dr) Pity Kaul

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Abstract

Indian health system has a wide gap of health services in relation to geographical distribution. To reduce the gap in health services, several policies and scheme like primary health care concept (1978), national health policy (NHP)-1983, 2002 and national rural health mission (NRHM,2005) implemented in country but health services were not much improved as expected by policy makers at peripheral level. Recently NHP (2017) discusses again about comprehensive primary health care and to achieve the universal health coverage in the country mid-level health provider (MLHP) /community health officer (CHO) has cadre developed and launched under Aayushman Bharat scheme. Aim of the present study was to know the knowledge and competence of CHO regarding non communicable disease (NCD) management. Quantitative research approach was used for study. Sample was CHO's who are posted at the health and wellness centre's (HWC's) and sample size was 15 CHO. Sample was selected by simple random sampling method. setting of the study was HWC. Tool and techniques of study was questionnaire for knowledge and observation check list for competence. Knowledge questionnaires was self-reported by CHO (includes information regarding diabetes, hypertension and cancer and its management) whereas observation check list was observed by researcher (include screening techniques and management skills of CHO). Obtained score of knowledge and competence are categories in three parts below average, average and good based on score. Finding of the study shows that 73.33% of them are having adequate level of knowledge and 26.67%of them having moderate level of knowledge whereas competence scores found that 66.67% of them are having good level of score and 33.33% of them having moderate level of score. Study finding also analysis that there is a significant positive moderate correlation between knowledge score and competence score. Study concluded that CHO are having good knowledge and having good competence of NCD screening and management.



Biography

Mr. Vikas Bhaskar is a Nursing PhD scholar and working as a Nursing faculty at UP University of medical sciences, Saifai, Etawah. He is having ten-year experience in nursing profession. He has completed his graduation and post-graduation from RGUHS, Bangalore. He is pursuing PHD in nursing from IGNOU, New Delhi. He is a life member of TNAI, SOCHNI, SOMI and NRSI. He has presented paper in conference, seminar, and symposium as a nursing expert and published paper in national and journals.



Effects of Manual Lymphatic Drainage & Tai-Chi on Breast Cancer Patients – A Interventional/Experimental Study



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Thakur Snehal

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Desale Gauravi

Intern at MGM School of Physiotherapy, India

Abstract

In Breast cancer, the malignant tumor grows from the breast cells. It has been a global burden in recent years, with 2.09 million cases reported by the World Health Organization, and 14 percent of total cancer in women in India, according to the National Health Portal, in 2019. Lymphedema of the upper extremity is one of the adverse effects of breast cancer treatment. Lymphedema can be defined as swelling of the arm primarily due to impaired lymph drainage. Risk factors for the disease other than their gender (female) and age (over 40 years) are obesity, harmful alcohol use, family history of breast cancer, history of radiation exposure, reproductive history, tobacco use, and postmenopausal hormone therapy. The classical features of breast cancer can be ascertained based on signs and symptoms evident in an individual will be a palpable breast lump, discharging nipple, a change in the appearance of the nipple, and pain in the breast or armpits. The other dermatological signs are evident such as on the nipple, puckering, or dimpling of the skin. This present study intended to evaluate the impact of manual lymphatic drainage and tai-chi interventions on breast cancer patients to banish the adverse effect of lymphedema. The results, therefore, suggest that in patients with breast cancer, the short-term effects of Tai chi may have prospective improvements in upper limb functional mobility and quality of life($p=0.05$) so additional large-scale trials with follow-up are needed to provide more reliable evidence.



Effect of Ergonomic Training on Work Related Musculoskeletal Disorders (Wmsds) Pain and Posture among Sugar Factory Workers



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Shrikant Mhase

Assistant professor (Community Physiotherapy) MGM School of Physiotherapy, Aurangabad, India

Abstract

Background: WMSDs (work-related musculoskeletal diseases) are a major occupational concern all over the world. WMSDs are characterized as "multi-factorial diseases" in which "the environment and work performance contribute significantly, but as one of a number of factors, to illness causation." WMSDs can be caused by a variety of factors, including constant fatigue and exhaustion from repeated long-duration muscular effort, and sudden injury from strenuous activities or unpredictable movements. WMSDs are a group of inflammatory and degenerative conditions that affect the muscles, tendons, ligaments, joints, peripheral nerves, and blood vessels that support them. WMSDs cause pain, loss of physical function, and a reduction in mental health, all of which have a negative impact on a person's capacity to work. In sugar-producing factories, workers are directly involved in the production process. Lifting heavy weights, twisting and bending activities, and awkward working postures including noise, lighting conditions, and pollution, putting them at risk for musculoskeletal disorders and psychological stress due to the lack of standard equipment are all part of the job description at the sugar factory.

Purpose: Thus, the goal of this study is to assess posture of sugar factory workers during working also to see how ergonomic training affects WMSDs and working posture in sugar factory workers.

Methodology: Participants with WMSDs, only male workers, age group 21-58 years, and those willing to engage in the study were the selection criteria for this study. The NPRS (Numerical Discomfort Rating Scale) was used to assess work-related musculoskeletal pain, and the OWAS (Ovako Working Posture Analysis System) approach was used to analyze working posture. After three weeks of ergonomic training, post intervention ratings were calculated.

Results: On comparing the pre and post intervention scores of NPRS in participants with ergonomic intervention, it was observed that the difference was highly significant ($p < 0.001$). Ergonomic intervention in the form of workplace exercises, activity modification and job modification were useful in correcting working posture among trunk, upper limb and lower limb



respectively. There was a significant difference in pre and post scores of OWAS (Ovako Working posture analysis systems)

Conclusion: This study's findings suggest that ergonomic training can help sugar factory workers reduce work-related musculoskeletal pain and improve their posture. This study also reveals that workers are more likely to have musculoskeletal problems as a result of their awkward working posture, which has an impact on both productivity and quality of life.



Correlation between Fear of Falls and Balance in Institutionalised Elderly



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Grover PRANJAL

Neuroscience PT, HOD, Lokmanya Tilak College of Physiotherapy, India

Abstract

Fear of falling is a serious health issue that is on par with the dangers of falling. Balance impairments negatively affect function, commonly decreasing the person's ability to participate fully in life. Fall risk factors in the elderly include fear of falling and poor balance. According to studies, elderly people who are concerned about their capacity to prevent falling may have a problem with their balance. When compared to institutionalised old, studies show that community-dwelling elderly have greater lower body strength, balance, and higher quality of life. The goal of this study is to find out how common fear of falling and balance impairment are in institutionalised older people, as well as how they are correlated. A total of 100 institutionalised elderly people ranging in age from 65 to 85 years old were included in the study. The Falls efficacy scale and the Berg balance scale were used to assess fear of falling and balance, respectively. Correlation between Fear of falls and balance is statistically highly significant at 0.1% level i.e $P < 0.001$. Correlation coefficient is negatively correlated. The study provided a correlation between fear of falling and balance in institutionalised elderly, indicating that the psychological and environmental aspect should also be considered while attempting to enhance balance in these individuals.



Diet and Its Effect in Behaviour and Mentalhealth



Basil Biju

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Abstract

When we look up for the meaning of ‘diet’ anywhere, whether it be in internet or to a person, one always gets a similar explanation. It can be either ‘the kinds of food that a person, a community habitually eats’ or ‘a special course of food to which a person restricts themselves either to lose weight or for the medical reasons. Are these the right way to define ‘diet’? Now check on another way on explaining what diet means-’Food and drink regularly consumed’. The way we define stuffs plays an important role in its way of use in reality.

How are diet and mental health linked?

The relationship between our diet and our mental health is complex. However, research shows a link between what we eat and how we feel. Our diet can affect our brain. Some foods can help us feel better. A diet with lots of vegetables, seafood, fresh herbs, garlic, olive oil, cereal and grains supplemented with fish oil can reduce the symptoms of depression. Research has also shown that our gut can reflect how we are feeling: if we’re stressed, it can speed up or slow down. Healthy food for our gut can include fruit, vegetables, beans and probiotics. Eating regular meals helps to regulate blood sugar. This may influence some of the hormones that control our mood and ability to concentrate. For this reason, poor mood and behavior are often observed in children who have been without food for too long.

Food and Mood?

It is well known that unhealthy eating patterns can cause mood swings. Blood sugar fluctuations and nutritional imbalances are often to blame. Without a steady source of fuel from the foods we eat, our mind and bodies don’t function well. The type of food we eat does affect our mood and personality. Multiple studies have shown that eating unhealthy or less nutritious food can lead us to anxiety, depression mood swings and much more. What we eat doesn’t just affect our mental health and wellbeing. Eating well-which means having a balanced diet full of vegetables and nutrients can improve your sense of wellbeing and your mood.

How food affect behaviour?

Diet can affect cognitive ability and behavior in children and adolescents. Nutrient composition and meal pattern can exert immediate or long term, beneficial effects mainly result from the correction of poor nutritional status. The relationship between nutrition and behavior is bi-directional in



nature, with nutritional factors able to affect activity and disposition, and behavior impacting diet and food intake. Growing research is revealing that what we eat may be a significant factor in how angry we feel. In fact, a University of California study showed that a diet high in trans fatty acids was directly linked to increased aggression. Medical studies have found that people on diets tend to be irritable and aggressive, the researchers write. They also looked at spending habits. The prevailing theory is that using self-control once wears you down and makes you less likely to do so again, making it more difficult to control aggressive behavior. After all, staying away from food and be in a hungry state won't help in improve your health, it will only worsen your health and your behavior.

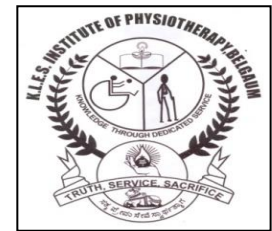
Diet is not just about staying away from foods, its actually eating more healthier and nutritious ones. Eating a healthy diet during this pandemic is very important. what we eat and drink can affect our body's ability to prevent, fight and recover from infections. While no foods or dietary supplements can prevent or cure covid-19 infection, healthy diets are important for supporting immune system.

Biography

Hi! I'm Basil Biju. Currently I'm doing BPT (1st year). My hobbies include reading books and listening to podcasts.



Prevalence of Non-Specific Low Back Pain among Auto Rickshaw Drivers in Belagavi City – An Observational Study



Shruti. S. Gachhi

KAHER Institute Of Physiotherapy, Belagavi, India

Abstract

Background: Low back pain (LBP) is a very common health condition and is a major cause of disability. Workload, strenuous posture and stress are the worst probable factors which affect the health of auto rickshaw drivers.

Objective: To determine the prevalence of non-specific LBP in auto rickshaw drivers of Belagavi city.

Methodology: 122 auto rickshaw drivers in the age group of 20-55years working for at least 2 years and have LBP since 6 months were screened using Oswestry Low Back Pain Disability Questionnaire (ODI) and ICF Documentation.

Results: Positive association between age, type of vehicle, and years of driving with ODI scores. 17.21% had mild disability, 68.85% had moderate disability and 13.93% had sever disability on ODI questionnaire. Maximum participants reported moderate difficulty in performance of sitting, bending, maintain a sitting posture, lifting, putting down objects and driving.

Conclusion: The prevalence of non-specific LBP was noted in 68.85% auto rickshaw drivers in Belagavi city. The maximum limitation was noted in sitting, bending, maintain a sitting posture, lifting, putting down objects and driving.

Keywords

Non-specific low back pain, auto rickshaw drivers, ICF, ODI

Biography

I'm Shruti.S.Gachhi Presently pursuing Final year of Masters in Community Physiotherapy and Rehabilitation from KAHER Institute of Physiotherapy. I completed my Undergraduation from the same Institution in the year 2020.



Correlation of Fatigue with Depression in Postpartum Women- An Observational Study



Patel Priyanka Hasmukhbhai

Shree Swaminarayan Physiotherapy College-Ranip, India

Dr. Dhara Vaghela

Shree Swaminarayan Physiotherapy College-Ranip, India

Abstract

Background: The postpartum period is generally defined as beginning first hour after delivery of the placenta and lasting about six weeks. Postpartum depression is a relatively common and potentially devastating disorder that develops in women which accompanying most common complain of fatigue in women. Depression may donate to fatigue or fatigue may contribute to depression.

Aim: Aim of the study is to correlate the fatigue with depression in postpartum women

Methodology: 'N' number of participants will be taken from the different areas of Ahmedabad city. Participants who will be meeting the inclusion criteria they will be included in the study. A written consent form will be taken from the subjects. After one week of delivery, the subjects will be asked to fill up the MFI scale which evaluate their fatigue and EPDS scale which evaluate their depression. Then it will be correlate the level of fatigue and depression in postpartum women.

Result: Awaited

Conclusion: Awaited

Keywords

Postpartum Women, Fatigue, Depression, Multidimensional Fatigue Inventory (MFI), Edinburgh perinatal/postnatal depression scale (EPDS).

Biography

Name of candidate: -Patel Priyanka Hasmukhbhai

Course of study and subject: Masters of Physiotherapy in Community Health And Rehabilitation

Accomplishments/ certifications:

- Certificate in Musculofascial Release Therapy.



Effectiveness of Neural Tissue Mobilisation Versus Deep Cervical Flexors Strengthening on Pain, Range of Motion and Quality of Life on Cervicogenic Headache Among Female College Students



Veronika Godwin Ajoo

Assistant professor, Department of Advanced Neurology in Physiotherapy, Columbia College of Physiotherapy, Bengaluru, India

Mareeswari

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Anita prem

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Professor, Columbia college of physiotherapy, Bengaluru, India

Porkodi

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Abstract

There has been a growing concern about the types of headache worldwide. Mostly headaches are not evocative of a serious medical problem. A range of people have periodical headaches that resolve quickly, while others experience frequent and enfeebling pain. Primary headaches include tension, migraine and cluster headaches. In our practice we have come across cervicogenic headaches once in a blue moon. Cervicogenic headache is a subgroup of secondary headache, stemming from a disorder of the cervical spine. The physiologic groundwork for this pain is convergence between trigeminal afferents and afferents from the upper three cervical spinal nerves. Approximately 47% of the global population suffers from a headache and 15-20% of those headaches are cervicogenic. The purpose of this quasi-experimental design is to study and find out the effect of neural tissue mobilisation versus deep cervical flexors strengthening on reducing pain and improving range of motion, quality of life among female college students over a period of 4 weeks and to develop an evidence-led approach to the clinical management of cervicogenic headache.



Thirty subjects were selected and assigned into two groups by convenient sampling method. Group A received neural tissue mobilization and Group B received deep cervical flexors strengthening. Visual Analogue Scale, Headache Impact Test-6, goniometer were used as outcome measures to record pain, quality of life and range of motion. This measurement was taken before and after the treatment over a period of 4 weeks. Statistical review was done using paired and independent 't' test. The analysis interpreted that both group had improvement in their outcome measures. The group which received neural tissue mobilisation technique showed more improvement than the group which received deep cervical flexors strengthening.

Biography

Veronika Godwin Ajoo, a motivated professor driven to inspire students to pursue academic and personal excellence. Most recently, she lives in Bengaluru where she is working as an assistant professor in the department of advanced neurology in physiotherapy at Columbia College of Physiotherapy. She did Bachelor of Physiotherapy from KMCH College of Physiotherapy and Master of physiotherapy (Neurology) from SRIPMS. Previously, she worked as an assistant professor and clinical physiotherapist in revathy group of institutions. She worked as an assistant professor in Shri Vijay Vidyalaya Group of Institutions. Her field of interest is to do PHD in animal physiotherapy and she would like to work on spinal cord injuries, cerebral palsy, vestibular dysfunctions.



Normative Value for Physiological Cost Index in Young Adults of Gujarat: An Observational Study



Prabhakar K

Physiotherapy department, Tutor, Civil hospital, Asarwa, India.

Dr. Bhise A

Physiotherapy department, U. N. Mehta institute of cardiology and research centre, India.

Abstract

Introduction:

Physiological cost index (PCI) measures energy expenditure. Whenever person has difficulty in walking, due to any problem in body, energy required for walking increases. Normative value for any measure is necessary to compare changes due to any abnormality in body and so does value of energy expenditure. But the normative value for physiological cost index is not available for the Indian population. So, this study was done to find out the normative value of Physiological cost index in young population of Gujarat.

Methodology:

Study design: An observational study

Inclusion criteria: Male and female aged between 18 to 35 years

Exclusion criteria: Subject having pain while walking

Procedure:

Written consent from the participants was taken. The subjects were asked to sit on a chair for 10 minutes before starting the test and the heart rate was measured. The subject was then asked to stand up and start walking when ready. The stop watch was started as soon as the subject started walking and distance covered in 6 minutes was recorded. The walking heart rate was calculated when it reaches to steady state or after 6minute.

For the calculation of walking speed distance was recorded.

$$\text{PCI} = \frac{(\text{walking heart rate}) - (\text{resting heart rate})}{(\text{Walking speed})}$$

Independent sample t test was used to compare the PCI with available normative value.

Result and conclusion: Normative value of PCI for adult male of Gujarat is 0.34 beats/meter and for female 0.37 beats/meter. No significant difference ($p=0.324$ (males) – $p=0.579$ (female)) was found while comparing these values with available normative values of PCI from other articles.

Key words

Physiological cost index (PCI), Normative value, Population of Gujarat.



Effect of Gong's Mobilization Versus Maitland Mobilization on Pain, Shoulder Abduction and External Rotation Mobility and Functional Ability in Subjects with Adhesive Capsulitis of Shoulder Joint



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Abstract

Adhesive capsulitis may be a common cause for shoulder pain and disability. There will be an unconstrained onset of shoulder pain along with progressive limitation of both active and passive Gleno-humeral motion. This condition most frequently affects the people between 40-60 years old. Approximately 70% of the patients presenting with adhesive capsulitis are women, and 20-30% of these affected develop adhesive capsulitis in opposite shoulder. Adhesive capsulitis is usually occurring of 10-20% people with diabetes. It is significant on with the incidence of 2% generally population in India. To study and find out the effect of Gong's mobilization versus Maitland mobilization on pain, shoulder abduction, external rotation mobility and functional ability in subjects with adhesive capsulitis of shoulder over a period of two weeks. A Convenient study. 30 subjects were selected and assigned into 2 groups by simple random sampling method. Group A received Gong's mobilization together with conventional physiotherapy, Group B received Maitland mobilization together with conventional physiotherapy and Group C received only conventional physiotherapy exercises. Numerical Pain Rating Scale, Shoulder Pain and Disability Index scores,



Goniometer were used as outcome measures to record pain, quality of life and shoulder abduction and external rotation of shoulder Range of Motion. This measurement was taken before and after the treatment over a period of two weeks. On analysis statistically using one-way Analysis of variance (ANOVA) test, it interpreted that all the 3 groups had improvement in their outcome measures. The group A which received Gong's mobilization technique together with conventional physiotherapy showed more improvement than the group B which received Maitland mobilization together with conventional physiotherapy group.

Biography

Ms. Mareeswari is an innovative physiotherapist with a broad range of clinical experience primarily within the field of musculoskeletal practice. She lives in Bengaluru, where she is working as an assistant professor in the department of advanced orthopedics in physiotherapy at Columbia college of physiotherapy. She has worked in Bose group of institutions as a clinical therapist and as an assistant professor. She has held the position of assistant professor at Sri Vijay Vidyalaya group of institutions. She did her bachelor of physiotherapy and master of physiotherapy (orthopedics) at SRIPMS. Her field of interest is to do PhD in Osteopath and she would like to work on idiopathic scoliosis, adhesive capsulitis of shoulder and osteoarthritis.



“Efficacy of Quadriceps Sets with Biofeedback and Modified Quadriceps Sets with Biofeedback along with Ultrasound in reduction of Pain and Active Extension lag in Bilateral Knee Osteoarthritis”- A Comparative Study



Dr. Gaurav Bhatnagar

Maharashtra Institute of Physiotherapy, Latur, India

Abstract

Background: The functional dysfunction in osteoarthritis knee is caused by pain and quadriceps muscle weakness. Physical rehabilitation usually includes quadriceps exercises i.e. isometric and isotonic exercises for the maintenance of joint range of motion and muscle strength. Biofeedback is a process that can be combined with it to increase the awareness about the extent of muscle work done by quadriceps muscle. The study aimed to compare the efficacy of quadriceps sets with biofeedback and modified quadriceps sets with biofeedback along with ultrasound in reduction of pain and extensor lag in knee osteoarthritis.

Method: A Total number of 30 patients were divided into group A and B, 15 each group according to inclusion and exclusion criteria using simple random sampling. Group A received quadriceps sets with biofeedback and group B received modified quadriceps sets with biofeedback. Pulsed ultrasound was given to both the groups prior to exercise. The outcome measures were pain and extension lag, which were assessed at baseline and after 2 weeks of treatment protocol.

Results: Both the groups showed improvement but between group analysis showed significant reduction of pain (mean 1.53 right side and mean 1.73 left side, $p < .0001$) and extensor lag (mean 5.33 right side and mean 6.06 left side, $p < .0001$) bilaterally in group B who had received modified quadriceps sets with biofeedback when compared with group A.

Conclusion: Modified quadriceps sets with biofeedback were more effective than quadriceps sets with biofeedback in reduction of pain and extensor lag in knee osteoarthritis patients.

Key Words

Biofeedback, Extensor Lag, Osteoarthritis Knee, Quadriceps sets.

Biography

Myself Dr. Gaurav Bhatnagar (PT) Currently working as Professor & HOD (MSK PT Dept.) in Maharashtra Institute of Physiotherapy, Latur since march 2017 till date. I have published articles



in various National and International journals and presented papers in national and international conferences. Member of BORS, MUHS Nashik. Graduated (BPT) from RGUHS, Karnataka in the year 2005 and completed MPT(Orthopedics) from DAVV University, Indore (MP) in 2008. Worked as Asst Professor in Apollo college of PT, Durg CG from Oct. 2008 to Feb 2017. Ex. Board of studies member at CG AYUSH Health Science University, Raipur.



“Effectiveness of Sonophoresis versus LASER therapy along with therapeutic Exercises in the management of OsteoArthritis Knee”

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Dr.Shilpa Khandare

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Abstract

Study Design: Experimental study design.

Background: Osteoarthritis (OA) is a chronic degenerative musculoskeletal disorder, with higher prevalence in women. Knee is one of the known Joint for destruction of cartilage and bony changes with subchondral sclerosis and osteophyte. Degenerative changes are seen around knee joint involving ligaments and cartilages. It is a heterogeneous group of conditions that leads to joint symptom and signs associated with integrity of articular cartilages.

Objectives: Present study was undertaken to add on to the available treatment methods for OA knee and to find out the effectiveness of Sonophoresis and LASER therapy for treating OA.

Procedure: 30 participants were recruited based on inclusion and exclusion criteria in Group A and Group B with 15 patients in each group. Group A was treated with Sonophoresis and Group B was treated with LASER therapy for a period of 2 weeks, 5 sessions per week. Pre and post assessment were taken using following outcome measures- Range of Motion (ROM) by Goniometer, Numerical Pain Rating Scale (NPRS).

Result: The outcome of NPRS and Knee ROM was statistically analyzed. ROM was found to be markedly increased in both the groups. Also there was noticeable decrease in NPRS in all the groups with p value significant statistically.

Conclusion: Both the groups showed improvement in NPRS and knee ROM but Group A who were treated with Sonophoresis clinically, found to be more effective than LASER therapy and hence both can be used as treatment of choice in patient with OA Knee.



Keywords

Osteoarthritis Knee; Sonophoresis; Laser Therapy; Numerical Pain Rating Scale (NPRS); Range Of Motion (Goniometer).



Impact of Exercises on Cartilage Health, Physical Performance and Quality of Life in Subjects with Degenerative Joint Disease of Knee



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Abstract

Background: Osteoarthritis (OA) is associated with cartilage erosion and bony changes with intermittent periods of synovial membrane inflammation and subsequent release of biomarkers of inflammation. Such biomarkers also represent as potential tools for monitoring effects of therapy on the tissue. Regular exercise is known to be advantageous in OA patients. It is unknown how exercise exerts its beneficial role in OA, and whether it mainly is accomplished via stabilization of the joints through muscle strength and control, or whether exercise has a direct effect upon the joint cartilage. Response of impaired articular cartilage to various types of exercise may be different. Therefore this issue needs to be evaluated so that future recommendations on exercises to osteoarthritis may be provided. Current knowledge in this area of interest has not been studied till date. Therefore, we aimed to investigate the impact of knee joint loading exercise on arthritic articular cartilage. Publication dates ranged from 2000 to 2020, potentially indicating a growing awareness and understanding of loading exercise on articular cartilage and its influence on biomarker levels.

Methods: Ten of the eighteen studies were randomized control trials, one cohort study, One case control study, three cross sectional studies and three pilot studies. Out of eighteen studies only three studies focused on patellofemoral and rest of the articles are focused on tibiofemoral joint



cartilage. Eleven studies focused on the cartilage extracellular turnover and remaining studies have analyzed inflammatory markers, 8 studies (44%) showed no difference in molecular biomarker concentration between the intervention and control groups. 6 studies (33%) reported a decrease and 4(22%) study comparisons reported an increase in molecular biomarker concentration all in favor of the loading intervention group. 13 of the studies applied proper randomization and allocation, although some studies failed to clearly report or adequately address dropouts of participants in the analyses (attrition bias) and failed to report whether outcome assessors were blinded to the outcomes of interest (detection bias).

Discussion & conclusion: The findings of the current study, evaluating the effect of loading exercises on molecular biomarkers related to inflammation and cartilage extracellular matrix turnover support exercise therapy being a safe treatment for knee joint cartilage with established KOA. However the effects of different types of loading exercises (FWB, PWB, NWB) on the impact of loading interventions on cartilage investigated through molecular biomarkers related to articular cartilage inflammation and degradation is not adequately studied



To Find Physical Activity among College Students Using International Physical Activity Questionnaires (IPAQ)



Dr. Jigisha Vaniya

Parul University, India

Abstract

Background: Many studies conducted worldwide found a steady decline in physical activity among all age groups and an increase in the sedentary lifestyle, obesity and perceived stress. Rising mental health issues due to physical inactivity among college students are a growing public health concern for most of the countries as these young people are the future social elite.

Objective: The aim of the study is to find physical activity among college students using International Physical Activity Questionnaires (IPAQ).

Method: The research was conducted in the years 2019- 2020 among one hundred college students and comprised 57 males and 43 females, mean age of 21.85 ± 4.24 , who could read and understand English from various colleges and universities of India. Students with any recent muscular-skeletal injury or trauma or neurological or cardiovascular conditions were exempted.

Results: There was noted a significantly higher level of stress among college students who have a lower level of physical activity. What was positive about the studied samples was that people who were indulged in physical activity has less stress.

Conclusion: Among the factors significantly affecting higher physical activity in researched samples were a significant variation in the level of perceived stress among people who spent less time for hobbies, people who are single and people who reside at home. High prevalence of stress as high as 80% is seen among college students of the collected samples and it has a weak association with physical activity. This suggests that indulging in regular physical activity may help people in reducing stress.

Keywords

India; IPAQ; mental health; physical activity; perceived stress; University or college students.



Parental Perception of Physical Activity & Temperament of Preschoolers during Covid-19 Pandemic: A Cross Sectional Survey



Dr Ravinder Kaur Marwaha

MUHS/MAEER'S Physiotherapy college Talegaon Db, India

Abstract

Background: The ongoing Covid-19 pandemic is a global threat and a health emergency. During this pandemic, due to prolonged school closures and home confinement, children are entirely reliant on their parents now, to meet all their developmental needs which is impacting children's and adolescent's lifestyle behavior such as physical activity & sedentary behavior which may further affect their physical and mental health. Early childhood (especially preschoolers of age group 3-5 year of age) is critical for social, emotional & Physical development. Under the current pandemic context access to these opportunities will likely be severely restricted which may compromise their development.

Purpose: To study the parental perception of Physical activity & Temperament of pre-schoolers during covid-19 pandemic.

Method: 111 Pre-Schoolers of 3-5yr (4.06±0.82) age group whose Parents were recruited in the study according to the inclusion & Exclusion criteria. Physical Activity questionnaire: categorization into sedentary, light, moderate, vigorous intensity activities (min/hr) & Colorado Childhood Temperament Inventory questionnaires were filled by the Pre-schooler's parents via Google Form and responses are submitted online. Data was collected & analysed according to descriptive statistics.

Result: Sociability (12.36±1.95), Emotionality (16.69± 3.96), Activity (19.73± 3.0), Attention span (12.41±2.67), Reaction to Food (14.92±4.29), Soothability (16.6±4.0). Time spent in (min/hr) Sedentary (111.08±112.5), Light intensity activities (24.45±10.0), Moderate Intensity Activities (47.43±16.3), Vigorous Intensity activities (25.0±8.1). Parents has Perception for light (37.5%), moderate (50%) & Vigorous activities (12.5%)

Conclusion: Pre-Schoolers were less sociable & less attentive during Covid-19 pandemic. As per Recommended Guidelines; Total Time spent in physical activity by pre-schoolers was less (1hr 35 min) and Time spent in sedentary level of activity was more(2hrs) during Covid-19 Pandemic.



Biography

Dr Ravinder Kaur Marwaha (PT) is a HOD & professor at MAEER'S physiotherapy college Talegaon Dabhade. she is a PhD scholar from Govt. Gujarat University and completed her Masters in Musculoskeletal sciences from Sancheti Institute college of physiotherapy, pune university. she has 14 years of academic experience. She has a book published on her name by Lambert publishing house.



Perceived Exertion, Stress and Cardiovascular response to workload among Bankers: An Observational study



Navpreet Kaur

Baddi University of Emerging Sciences and Technology, India

Abstract

Introduction: Banking professionals has to deal with different task and target oriented work in their daily life. In order to complete their work on time employee must experience a state of perceived exertion, stress and arousal of cardiovascular problems. As the literature suggest an increasing rate of stress, exertion and cardiovascular problems among the employees of different cadres. It has become need of the hour to understand the status of stress and exertion among employees. In this line of thought the present study attempts to evaluate the level of Perceived Exertion, Stress and Cardiovascular response to workload among Bankers.

Aim and Objectives : The aim of the present study is to evaluate perceived exertion, stress and cardiovascular response to workload among Bankers. The study evaluates and compares morning and evening ratings of perceived exertion responses to workload , perceived stress and compares morning and evening cardiovascular parameters such as heart rate, blood pressure among Bankers.

Methodology: A total of 60 subjects , having age 25-40years were selected from Private and Government Bank . They were employees who were related to public dealing and worked for at least 6 to 8 hrs/day in banks. The measurement of heart rate, blood pressure was taken in morning and evening using Omron blood pressure monitor. Perceived exertion was observed through Borg rating of perceived exertion scale and perceived stress was observed through perceived stress scale and data was analysed through appropriate statistical tool.

Result: The study showed that the rate of Perceived exertion among bankers significantly increased in the evening in contrast to that in morning ($t=1.08, p\leq 0.05$). Findings suggested a moderate (85%) to high (11.66%) level of perceived stress among the bankers. Both systolic and diastolic blood pressure showed a significant increase in the evening among bankers. Heart rate also showed significant increase in evening among bankers.

Conclusion : The current study concludes that the employees of banks have moderate to high levels of perceived stress. Further their response to the work load demonstrated increased level of exertion, as indicated by the differences in parameters such as perceived exertion, Blood pressure reading, heart rate taken in the morning and the evening. It is important here to understand that these alterations in cardiovascular response could affect physical and mental fitness of the employees, which ultimately results in poor work performance and quality of life.



Effect of Dual Task Testing on Gait in Individuals with Obesity- A Narrative Review



Dr Sumam Sunny

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Dr. Sandeep Nair

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Abstract

Individuals with obesity are prone to impairments associated with cognition, balance and gait. Gait is a complex task that places demand on the motor and cognitive system. Furthermore, obesity has been linked with reduced executive function which is essential for planning of movements during walking activity. Dual-task methodology has been increasingly used to assess cognitive motor relationship while walking in various conditions. However, the synthesis of the literature on the effect of dual task testing on gait in obese patients has not been performed. The objective was to systematically review the literature on the effect of dual task testing on gait in individuals with obesity. Electronic databases screened were PubMed, Cochrane, Google Scholar, and Medline for studies published from January 2001 to July 2021. Studies including dual task testing for obese patients were included. The included studies comprised of study population free from systemic diseases likely to directly impact gait.

Out of the seven studies that met the inclusion criteria, five studies assessed effect of dual task testing on pace, four studies have assessed effect of dual task testing on rhythm. Only one study determined the effect of dual task on gait variability and postural control. The ability to perform dual task gait is impaired in obese when compared to non-obese individuals in areas of pace and rhythm.

A small number of studies, heterogeneous methodology and participant characteristics limited our ability to conclude with certainty that dual-task testing effects are more prominent in people with obesity compared to healthy adults. Currently, the scope of dual-task research in people with



obesity is limited because of unstandardized protocols and lack of task cost and task prioritization calculations. As it is well documented that obesity affects brain structure and function, future research should examine the cognitive-mobility relationship in people with obesity.

Biography

My name is Dr Sumam Sunny (PT), presently working as Assistant Professor in Ashok and Rita Patel Institute of Physiotherapy. I have completed my MPT in Neurological and Psychosomatic disorders from Nitte University, Mangalore. I have a work experience of 5 years in the field of academic and clinical experience. I have presented 2 papers in national conferences and 3 posters in national level conference. I have two publications which include “Effect of visual cue training on walking in elderly- A randomized control trial” and “Effect of computerized cognitive training on cognition and quality of life in elderly with type 2 diabetes”. I have attended various workshops on research methodology, SPSS analysis and evidence synthesis using Rev Man 5.4. I have attended 15 national level conferences and I am a member of international forum of teachers of the UNESCO chair in BIOETHICS and registered member of IAP and GSCPT. Currently I am pursuing my PhD from Charusat University. My research interest include cognitive rehabilitation, rehabilitation of elderly, cognitive motor interference assessment, balance and gait rehabilitation in type 2 diabetes.



Single-Leg Roman Chair Hold is more effective than the Nordic Hamstring Curl in Improving Hamstring Strength-Endurance in Gaelic Footballers with Previous Hamstring Injury



Shyam Sundar

Meenakshi Academy of Higher Education and Research, India

Abstract

Poor hamstring Strength-endurance is a risk factor for hamstring injuries. This Study investigated the effectiveness of the single-leg Roman Hold and Nordic hamstring curl in improving hamstring Strength-endurance. Twelve Gaelic footballers (mean 6 SD Age, height, and mass were 25.17 6 3.46 years, 179.25 65.88 cm, 85.75 6 4.75 kg, respectively) with a history of hamstring injury were randomized into 2 groups that performed 6 Weeks of either Nordic hamstring curl or single-leg Roman Chair hold training. The single-leg hamstring bridge (SLHB) Was measured before and after intervention. The Roman chair Group showed a very likely moderate magnitude improvement On SLHB performance for both legs (23.7% for the previously Injured leg [90% confidence interval 9.6–39.6%] and 16.9% For the noninjured leg [6.2–28.8%]). The Nordic curl group Showed a likely trivial change in SLHB performance for the Noninjured leg (22.1% [26.7 to 2.6%]) and an unclear, but possibly trivial change for the previously injured leg (0.3% [25.6 to 6.6%]). The Roman chair group improved very likely More with a moderate magnitude in both the noninjured (19.5% [8.0–32.2%]) and the previously injured leg (23.3% [8.5–40.0%]) compared with the Nordic curl group. This study Demonstrated that 6-week single-leg Roman chair training sub-stantially improved SLHB performance, suggesting that it may Be an efficacious strategy to mitigate hamstring (re-) injury risk. Conversely, 6-week Nordic curl training did not substantially Improve SLHB performance, suggesting this may not be the Intervention of choice for modifying this risk factor.

Biography

I am SHYAM SUNDAR doing Masters in Physiotherapy (Sports) at Meenakshi Academy of Higher Education and Research, Chennai. I have completed my Undergraduate at Ramachandra college of Physiotherapy, Chennai.



Effects of Blood Flow Restriction Training on Knee Osteoarthritis



Shanthi Dass.A

Meenakshi Academy of Higher Education and Research, India

Abstract

Osteoarthritis related knee pain is the direct cause of impaired walking and staircase climbing in the elderly. The disease encompasses changes in cartilage metabolism and synovial inflammation such as cartilage deterioration, joint space narrowing, Osteophyte formation and sclerosis of subchondral bone. Importantly patients with osteoarthritis are often unable to exercise at such high intensities, limiting the application of conventional light intensity resisted training(LIRT), not only due to pain but also the pathophysiology of the disease. Recently a great deal of attention has been drawn to blood flow restriction training (BFRT) It generally combines low intensity resisted training with partial blood flow restriction to the working muscles via inflatable air cuffs fixed in the proximal part of the limb exercised. It has been shown to promote increase in muscle size and strength compared to those observed after conventional high intensity resisted training(HIRT). Therefore the aim of this study was to compare the effects of BFRT to more traditional resisted training on lower limb muscle strength and mass. BFRT would result in similar benefits as compared to conventional high intensity resisted training while inducing less pain.

Biography

I am **SHANTHI DASS. A**, doing my post graduation in sports physiotherapy at Meenakshi college of Higher education and research, Chennai. I have completed my Under graduation in Sri Ramachandra Medical College and Research Institute, Chennai. I Have presented a poster in Pilates based exercise protocol for non-specific low back pain (NSLBP). I am also a clinical physiotherapist practicing for the Past 20 years and a STOTT Pilates instructor, certified by Merrithew Canada.



Effect of Cognitive Impairment on Balance in Obese Elderly Individuals with Type 2 Diabetes Mellitus



Vidhi Tandel

Neurosciences, Tutor Cum Clinical Therapist, S. S Agrawal Institute of Physiotherapy and Medical Care Education, VNSGU, Gujarat, India

Dr. Edrish Contractor

Neurology and Psychosomatic Disorders, Assistant Professor, Ashok and Rita Patel Institute of Physiotherapy, CHARUSAT, Gujarat, India

Abstract

Background: Balance is an integral component essential to perform the majority of activities of daily living. Subjects with T2DM are more vulnerable to impairments due to balance dysfunction. Deterioration in motor function is secondarily contributed by obesity intertwined with cognitive impairment. An upsurge in the 2 levels of BMI also causes decrement in brain volume irrespective of age and morbidity. Fall incidence was higher among participants using insulin, HbA1c>7%, hypertensive and females. People with T2DM experience low cognitive test scores due to more HbA1c levels and longer period of diabetes over 60 years when correlated with healthy individuals. Older individuals with type 2 diabetes have limited ability to divide attention between tasks and processing capacity to carry out tasks when compared to non-diabetics. A decline in test scores of memory, executive functions, processing speed and verbal fluency with progressing of time in T2DM.

Objective: To determine the effect of cognitive impairment on balance in obese elderly individuals with type 2 diabetes mellitus. **Methods:** The design was a cross sectional study wherein 80 participants were recruited. Inclusion Criteria includes patients with BMI $\geq 30\text{Kg/m}^2$, MMSE- 10 - 23, Participants aged between 60 to 75 years, Participants having Type 2 Diabetes Mellitus 12, Both genders, Duration of type 2 diabetes mellitus - 5-10 years, BBS – 21-56. Participants having Neurological Conditions which can affect balance and cognition (Stroke, Parkinson's Disease, etc.), Participants having Dementia, Participants having any peripheral neuropathy, Participants having any orthopedic complications including fractures, Deformity etc., Participants with Traumatic Brain Injury were excluded from the study. Participants were screened for cognitive impairment and balance problems by questionnaire-based method by using Addenbrooke's cognitive examination and MiniBEST Test. Pearson's correlation analysis was used for reporting a correlation between Cognitive impairment and Balance among obese patients with type 2 diabetes mellitus. **Results:** A moderate positive significant correlation between ACE III and Mini-BEST Test



in participants along with obesity and Type 2 Diabetes mellitus. Conclusion: The present study concludes that Cognitive impairment is moderately correlated with balance in elderly obese subjects suffering from type 2 diabetes mellitus. Screening of cognition should be included as an integral component while assessing balance in aged individuals presenting with obesity and diabetes. A blend of interventions focusing on cognition and sensorimotor tasks should be investigated for balance rehabilitation in the future. Key words: Type 2 Diabetes Mellitus, Obesity, Cognitive Impairment, Balance.

Biography

I Vidhi S. Tandel currently working as a faculty at S.S. Agrawal Institute of Physiotherapy and Medical Care Education, Navsari. I have completed my Graduation from M.S University, Vadodara and Post-Graduation (Neurosciences) from Charotar University of Science and Technology, Changa. I have presented Model in Neuro Physiotherapy League at Ashok and Rita Patel Institute of Physiotherapy, Charusat, Changa.



Exercises and women with polycystic Ovarian Syndrome



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Venkatesh.N

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Abstract

Background: Polycystic Ovarian Syndrome (PCOS), an endocrine disorder is characterized by changes in hormonal levels influencing 5 to 15% of women in their early second decade of life. Symptoms of PCOS include irregular menstrual cycle, hirsutism, androgenic alopecia, acne and acanthosis nigricans, anovulation and amenorrhea which can lead to infertility. PCOS is also related to obesity, cardiovascular disease, type II diabetes, and metabolic syndrome. Thus this study aims to search and identify information in the literature related to benefit of different types of exercise training in polycystic ovarian syndrome.

Methods: Literature search was done extensively throughout the following databases, Cochrane Central Register of Controlled Trails, PubMed, EBSCO, CINAHL (Cumulative Index of Nursing and Allied Health Literature), Scopus. All published journal articles from year January 2010- May 2021 were retrieved.

Results: Better improvement of anthropometric measurements following aerobic exercises, (11 studies out of 30 studies) especially in BMI, WC, 7 studies have shown HIIT has a better outcome on anthropometric measurements esp BMI, WC

Discussion&Conclusion: Resisted exercises showed a very positive influence on hormonal outcomes. Only four articles exist on the effect of exercises on genes and proteins which are mostly immediate effect studies, that can be better options for future research. Resisted exercises are found to have a good benefit on few parameters, more studies can bring out the potential benefits of resisted exercises on PCOS. Recent research also shows that cognitive ability also should be taken care in women with PCOS. Also more studies to be encouraged on psychological well being of the women with PCOS

Key words

PCOS, HIIT, Aerobics, Resisted exercise



Effect of Aerobic Exercise Training on Linear Measures of HRV and Baroreflex Sensitivity in Hypertensive Individuals



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Abstract

Background Dysregulation of the autonomic nervous system has been implicated in the development of hypertension. It remains unclear whether aerobic exercise training could improve autonomic control in hypertensive patients.

Aim To systematically summarize effects of exercise training on cardiac autonomic function measured through Heart Rate Variability (HRV) and Baroreflex Sensitivity(BRS)in hypertensive patients.

Methods Electronic databases Pubmed, PEDro, Scopus and Web of science were systematically searched to retrieve relevant evidence from inception till December 2021 . One reviewer screened the obtained results. Data extraction was done using Cochrane data extraction tool .Two reviewers independently assessed risk of bias (RoB) for each study using the criteria outlined in the Cochrane Handbook for Systematic Reviews of Intervention.

Results 3 RCTs were found to be relevant. Cohens d was used to calculate the effect size from the post intervention mean \pm SD. The effect size of aerobic training versus no training for outcome parameter HRV (LF/HF)was small to large (range 0.25 – 0.9), for R-R interval was large (cohen's d = 1.2) and for BRS was medium to large range (0.6-1.1).

Conclusion Aerobic exercise training is effective to enhance Cardiac Autonomic Function in hypertensive patients.

Biography

I, Ayesha Miraj Abidi a post graduate student pursuing Masters of Physiotherapy cardiopulmonary at the Center of Physiotherapy and Rehabilitation Sciences department of Jamia Millia Islamia (JMI) , New Delhi. I have completed my Bachelor's of Physiotherapy also from JMI and six months of internship from Indraprastha Apollo hospital, New Delhi. Dr. Jamal Ali Moiz (Phd, MPT



cardiopulmonary) is an assistant professor at Jamia Millia Islamia university, having 582 citations under his name and h- index of 16. Dr. Aqsa Mujaddadi is an assistant professor at Jamia Millia Islamia university (pursuing Phd, MPT cardiopulmonary), having 17 citations under her name and h-index of 2



Effectiveness of Stacked breathing technique on PEFR and Oxygen saturation in CABG patient- An RCT

Rekha Marbate

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Abstract

Research Question(s): whether stacked breathing is effective in improving PEFR and oxygen saturation at tissue level in patient with CABG?

Design: An experimental study with Randomized Clinical Trial

Participants: Total 100 patients with age group 50-70 years, BMI within range 18.5-24.9 kg/m² [normal weight] both male and females admitted in cardiac unit and scheduled for surgery were selected for study. Subjects were randomized into two group Group-A receives Stacked breathing exercises along with conventional therapy and group-B receives regular conventional therapy.

Intervention: Stacked breathing is a deep breathing exercise, which involves stacking of air one over another for at least 3 breaths and holding it for atleast 10 seconds inside chest under patients will.

Outcome measures: Peak Expiratory Flow Rate and Oxygen saturation at tissue level

Results: Group A[stacked breathing] and group B[Conventional therapy] both are effective in improving Peak Expiratory flow rate post-operatively , At post-operative day-3 [POD-3rd] , group A achieved mean PEFR value 298.4 L/min and Group B achieved 160 L/min over pre-exercise value [Group A- 136 L/min and group B- 129.8L/min]. Comparing both the data, we get statistical difference with p value >0.001. Oxygen saturation at tissue level [SpO₂] showed optimized value of 97 % [GroupA-97.04 % and Group B-97.44%]at POD-3rd.

Conclusion: Stacked breathing exercise can provide add on effect to conventional physiotherapy in improving Peak expiratory flow rate. Improvement in Oxygen saturation cannot be clear with the effect of stacked breathing.

Keywords

coronary artery bypass graft, Cardiothoracic surgery, Peak Expiratory Flow Rate, Oxygen saturation at tissue level, stacked Breathing, Physiotherapy.



Effectiveness of Occupational Therapy program for helping Women in dealing with violence against them



Dr Nazia Ali

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Abstract

In India the Prevalence of domestic violence among women found is 77.5% and 40% of women is having severe domestic violence. 65.8% of women are facing physical violence, 17.5% women are subjected to sexual abuse and 54.2% women reported emotional abuse.

Aim: To assess different forms of domestic violence among women as well as to see the effectiveness of Occupational Therapy Program in preventing or reducing the violence against women victims.

Method: A convenience sample of 50 victimized women was taken from slum region of South-west Delhi, India. The Domestic Violence against Women Assessment Tool was designed to determine the level of domestic VAW in low-income countries. Results: Result showed that most of the women were facing physical violence (92%), psychological violence (88%) and gender inequitable norm (82%). Pre and Post Mean and standard deviation and paired t-test value of The Domestic Violence against Women Assessment Tool score showed that there was significant impact of Occupational Therapy Program in reducing the violence against women victims.

Conclusion: Thus the study concluded a strong need for Occupational Therapists for women facing domestic violence.

Key words

Domestic Violence, Occupational Therapy, Victimization, Violence, Women.

Biography

Dr. Nazia Ali, MOT (Paediatric). Innovative Occupational Therapist, with over 11 years' clinical experience with adults, adolescents, and children within the inpatient, outpatient units, school, and community-based settings. Her professional interests include research and addressing the behavior issues among children and adolescents with special needs and women's health.

Her Research Interests reflect in wide range of publications in various Peer Reviewed Journals of high repute. She has been Associated with lots of national and International Workshops and Conferences as a Delegate, Resource Person and an Organizer.

Awarded as "Young Occupational Therapist" Award by Venus International Foundation in 2018.



Intention, Usage and Literacy Related To M-Health Application amongst Rural Population



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Abstract

There is a constant upsurge in the prevalence of non-communicable diseases in the last two decades. So, to cope with the increasing burden on healthcare; utilization of m-health can prove beneficial. Despite the technological advancements, need for alternative methods, availability of resources like smartphones and internet facilities there is limited usage of m-health applications. Therefore, this study was conducted to determine the intention, usage and literacy related to m-health in the rural population. Total 384 door-to-door surveys were collected from the rural community of central Gujarat. Participant from different socio-economical, vocational and educational background with age ranging from 18-90years were recruited. After obtaining written consent two questionnaires regarding intention, usage and literacy related to m-health were provided to the participants. We found that about 8% of the participants had used online health information in the past 12months, only 3% had m-health applications installed in the phones, digital-health literacy was low and participants had questionable trust on the health information available online nevertheless almost 60% of the participants were interested in exchanging medial information electronically. These findings are encouraging to conduct digital-health literacy drives for the rural population to improve community awareness and usage of m-health applications in the future for the advancement of healthcare system.

Biography

Thakar VT is a passionate academician and a healthcare professional with a Master's degree in Physical Therapy from Gujarat University, India. She predominately works with clients suffering from cardiopulmonary conditions and provides client-centred care & practices holistic approach in



helping individual to achieve and sustain change for better health and positive physical & behavioural outcomes. She is pursuing PhD from Charusat University with an area of interest in technology-enabled hypertensive care. She has presented her research projects at various national and international conferences and had worked as a team member for various Industry-based consultancy projects.



Effectiveness of Ergonomic Intervention on Risk Hazards of Musculoskeletal Disorders in Food Mess Workers



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Abstract

Background: Musculoskeletal disorders (MSDs) have greater prevalence amongst the occupation of laborers. High prevalence of MSD involving neck, back and upper and lower extremities and due to uncomfortable work postures was observed among food mess workers. Implementing appropriate intervention strategies to limit development of musculoskeletal disorders was necessary. Rapid Entire Body Assessment (REBA) is the scale used to assess the ergonomic risk hazards.

Objective: To assess the effectiveness of ergonomic intervention on risk hazards of musculoskeletal disorders in food mess workers.

Methodology: Total 30 participants were included in the study with 15 participants in each group i.e Group A and B with the age group 20-50 years. Both the groups were assessed with REBA scale for the ergonomic risk hazards. Then ergonomic advice and intervention was given for group A and only ergonomic advice for group B as a treatment. After the 3 Weeks of intervention the REBA scale was reassessed and comparison was made between the group and within the group

Result: For group A pre and post REBA scores were extremely significant with P value < 0.001. For group B pre and post REBA scores were extremely significantly different with P value < 0.001. Between group analysis showed statistically significant difference in REBA score. (P < 0.05) stating group A showed more improvement than group B.

Conclusion: This study concluded that 3 weeks of ergonomic intervention was effective in minimizing the risk of musculoskeletal disorders in food mess workers.

Keywords

Ergonomic risk hazards, Ergonomic intervention, flexibility exercises, musculoskeletal disorders



Menstrual Health and Hygiene among Adolescents: A Narrative Review on Current Scenario in India



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Abstract

Purpose: To find about the knowledge, attitude and beliefs related to menstrual health and hygiene among adolescents in India. Thereby understanding the status and source of information of menstrual health and hygiene among adolescents.

Relevance: Lack of effective knowledge regarding menstrual health and hygiene can have negative impact on health domains in adulthood. Few examples: Urinary tract infections, vaginal candidiasis, Pelvic inflammatory disease. Good lifestyle and health habits are inculcated from school life. Therefore, once the lacunas are found, this could be a stepping stone for further studies to enhance pelvic health and hygiene, thereby ensuring women's health. Effective strategies to promote adolescent health will lead to enhanced health among women.

Methods: Databases searched were Medline, Pubmed, Science Direct, CINAHL and Google Scholar for publication from 2010 to 2021. 10 articles reviewed for knowledge, attitude, beliefs, practice regarding menstrual health and hygiene and its management among adolescents in all zones of India.

Results: The main observations are lack of health education on puberty, menarche and menstruation related pelvic health and hygiene among adolescent girls of India.

Conclusion: The need of the hour is to have accurate and adequate information about menstrual health and hygiene for adolescents in India.

Implications: Future educational intervention studies on menstrual and pelvic health and hygiene management strategies can be conducted based on the lacunas identified.

Keywords

adolescents, attitude, knowledge, belief, awareness, menstrual health, menstrual hygiene



Education about Menstrual Hygiene among Adolescent Girls in Rajasthan (Sirohi District)



Dr. Hema Swaroopa

Columbia College of Physiotherapy, RGUHS, Bengaluru, India

Abstract

Background: Menstrual hygiene is a matter that is insufficiently supported. Lack of privacy and cleanliness of toilets for adolescent girls; make them liable to internal, emotional and physical problem especially during their periods.

Objectives:

- To assess the knowledge about menstrual hygiene and physical problems of menstruation.
- To assess the menstrual hygiene practices adopted by the girls during menstruation.
- To identify the changes in menstrual hygiene practices of girls after educating.

Methods: A cross-sectional study was conducted among 352 adolescent girls of government secondary school of Rajasthan sirohi district.

Results: Out of 352 participants, 92% subjects reported that they do not have got a clean place to change their sanitary napkin. 92% mentioned that they are not ready to change their menstrual materials whenever they needed. 73% reported that they were worried that somebody would see them while changing sanitary napkin. 53% reported that there is no access for a basin to soak or wash their stained undergarments.

Conclusions: The educational program of the schools also should incorporate the content on menstrual cycle and menstrual cleanliness practices. School headmistress/ headmasters/ staff members, mothers, siblings and relatives also should be well educated on menstrual hygiene practices and motivated to enlighten their daughters to practice good menstrual cleanliness practices.

Keywords

Adolescent girls, knowledge, menstrual hygiene practices and Menstrual Practice Needs Scale (MPNS- 36)



Biography

- Dr. Hema Swaroopa,
- MPT, Specialized in PT Obstetrics and Gynaecology, Completed in 2017 from SAVEETHA University Chennai.
- Currently pursuing PhD in physiotherapy (OBG) from Madhav University.
- Working as Assistant Professor in Columbia college of Physiotherapy, RGUHS, Bengaluru.
- Certified as women's health physiotherapist and personal health counsellor from V care women
- Principal investigator and Co-author in Research Publications



Ergonomics in Dentistry



Dr.S.Dinesh

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Dr.S.Prasanna

Reader, Dept of Oral Pathology, Seema Dental College and Hospital, Rishikesh, Uttarakhand, India

Abstract

Ergonomics is the study of how the body interacts with the environment when performing a task or activity. 'Ergon' means work; 'nomoi' means the science of work and a person's relationship to that work. The things that ergonomics deals with are body mechanics, the tools and the task being performed. Most job related injuries are caused by falls, repetitive movements, awkward postures, reaching, bending over, lifting heavy objects, applying pressure or force, or working with vibrating tools. They can cause stress and strain on muscles, nerves, tendons, joints, blood vessels or spinal discs. These injuries are otherwise called repetitive stress injuries and work related musculoskeletal disorders.

Dental work poses some interesting ergonomic challenges. Dental professionals commonly experience musculoskeletal pain during the course of their careers. Dental professionals are concerned about patients' comfort, but probably pay little attention to their own until they begin to experience discomfort or pain. With a little attention and creativity, dental professionals can improve their Comfort on the job. The present paper will discuss in detail about ergonomics in dentistry.

Biography

DR.S.DINESH, MPT (Orthopaedics), MHSc (Applied Ergonomics) teaching experience of 8 yrs, 6 journal publications, 1 book authored & clinical practice for 9 yrs. Interested in Ergonomics, Manual Therapy, Orthopaedics, Yoga, Sports Injury.

Dr.S.PRASANNA, MDS, MHSc (Public Health), PGDHS (Tobacco control), UCFO with teaching experience of 11 yrs with 21 publications in various national journals, 3 books authored & 10 yrs of clinical practice.



Reliability and Validity of Gujarati Version of the 12-Item Short Form Survey in Mothers of Children with Cerebral Palsy



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Abstract

Background: The mothers of children with Cerebral Palsy report not only declined physical and mental health, but also impaired quality of life. The 12-Item short form survey is a self-reported outcome measure assessing the impact of health on an individual everyday life. These scales are not available in Gujarati version. If the reliability and validity of Gujarati version of this scale good, it will be helpful for clinical use and community also.

Purpose: To check the reliability and construct validity of the 12-item short form, survey in mothers of children with cerebral palsy

Methodology

STUDY DESIGN: An Observational study

SAMPLING TECHNIQUE: Convenience sampling

STUDY DURATION: 1 Month

SAMPLE SIZE: 89

Result: Awaited

Conclusion: Awaited



Ergonomics Modifications and Improving Healthy Lifestyles and Well-Being Among Students in Developing Countries as an Early Disease Prevention Initiative- an Experimental Study



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Abstract

Background Statement: Early ergonomics intervention and education from childhood is considered to be critical as they are future of our country for the global economy and individuals alike. The Special Interest Group hopes to play its part in helping young people to develop good habits and enter the workplace with less ill health and injuries and have a more positive approach and attitude towards wellbeing. As the healthcare common say “prevention is better than cure” It would be better said “Early prevention in childhood is crucial to our survival than any remedy”. Also Health promotion programs in students should be in place to address such new challenges associated with improved technologies and improvement of healthy lifestyle by modifying ergonomics. This study raise awareness of the role of ergonomics in protecting and enhancing



children's physical and mental development. Children's posture correction, Ergonomics for home computing, aerobic exercise training, flexibility training, balance training and muscular strengthening exercises are all part of the intervention.

Purpose: The program's purposes are numerous and diversified, encompassing physical, mechanical, positional, environmental, and even social variables. Awareness Program of Modification and correction of ergonomics with enhancing the culture of Safety and Health, Physical activity and Wellbeing among students of the educational institutes and to enhance school-aged children's quality of life.

Methodology: The experimental study involved 300 high school students (ages 8 to 18) over a six-month period. We're currently conducting awareness campaign throughout the schools in multi-centric areas. In our study, we used snowball sampling, which is a good way to get a large sample size;

Result and Conclusion: After completion of study.

Keywords

ERGONOMIC MODIFICATION, QUALITY OF LIFE, DISEASE PREVENTION, PHYSICAL THERAPY, WELL-BEING.

PRESENTED BY: ISHWA NATHWANI

Biography

Principal investigator and concept note by Dr. Pooja Kumari Mahaseth Assistant Professor and Research Faculty At **MGM SCHOOL OF PHYSIOTHERAPY, AURANGABAD**. She received her masters degree from **SRM INSTITUTE OF SCIENCE AND TECHNOLOGY, CHENNAI**. Her recent publications include “The Effect Of Multisensory Training On Balance And Gait Among Elderly Populations For Fall Prevention: A Randomised Controlled Trial” AND “Sensory Integration Therapy Verses Conventional Physical Therapy Among Children With Cerebral Palsy On Gross Motor Function – A Comparative Randomized Controlled Trial.”



A Survey of Urinary Incontinence in Multigravida Females of Age Group 40-60 Years of Vasant Vihar Area in Thane City



Koli NIRMITEE

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Parle JYOTI

Community PT, HOD, Lokmanya Tilak College Of Physiotherapy, India.

Abstract

Urinary incontinence (UI) is the complaint of involuntary leakage of urine on effort or exertion, such as sneezing or coughing and known to be prevalent in females more so in those who are multipara, having an immense impact on the psychosocial health; associated with decline in quality of life. The incidence is adverse due to numerous components: hindrance and humiliation experienced while stepping forward and reporting the same, negligence due to insufficient knowledge, shyness, financial vulnerability. Although several large-scale studies have focused on epidemiology of Urinary Incontinence in females of western countries, limited data is available from Asian countries, making it the need of the hour to conduct a study in these countries. The objective was to observe the prevalence of Urinary Incontinence and estimate the percentage prevalence of Stress, Urge, Mixed Urinary Incontinence. Hence a cross-sectional study was undertaken wherein 200 multigravida (40-60 years) were selected based on the inclusion criteria; the International Consultation on Incontinence Questionnaire-UI Short Form (US-2003) was administered. Results showed the prevalence of urinary incontinence in multigravida to be 45% with stress incontinence being the highest (27%). In conclusion, awareness about the symptoms of urinary incontinence and related risk factors will lead to appropriate and timely measures for prevention and treatment hence this study was conducted.



Effect of Virtual Reality versus Conventional Therapy on Static and Dynamic Imbalance in Stroke Patients- A Comparative Study



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Abstract

Background & purpose: Stroke is defined as the sudden onset of focal neurological deficits, as a result of the interruption of blood flow to a specific part of the brain. This condition is characterized by loss of functions of the motor, sensory and higher brain cognitive faculties to various degrees typically on side of the body opposite to side of the lesion. Such motor deficits will lead to dramatic alteration in lifestyle. The purpose of present study is to find out the effect of virtual reality in balance imbalance in stroke patients.

Method and sampling: The aim of study to investigate the effect of virtual reality and conventional therapy in balance imbalance in stroke patient. 30 subjects suffering were available for the study and later divided into two equal halves of size 15 by using a simple random sampling technique that constituted two groups and further designated as “group A” and “group B”. The patients with stroke in group A received virtual reality with sitting, standing and maintenance of trunk stability in standing position while other stroke patients of group B received conventional therapy and that asses by BBS and TUG scale.

Outcome measure: Berg’s balance scale, Timed Up and Go test.



Results: The statistical analysis showed that virtual reality is more effective in static balance than dynamic balance.

Conclusion: On the basis of data analysis it can be concluded that the virtual reality is more effective for improving static balance and muscular strength, endurance, stability, mobility than conventional treatment for stroke patient.

Key words

Virtual reality, conventional therapy, stroke.



Prevalence of Burnout, Psychological and Musculoskeletal Problems among Healthcare Professional during Pandemic Crisis



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Abstract

Background: In current days, healthcare professionals are exposed to different risks and hazards due to increased load with usual job plus extra COVID-cases which increased their workload portfolio without forgetting the risk to exposure to the virus which may result into deaths. A very high number of healthcare professionals have reported that they find their work stressful and have difficulties balancing their work with their private life **Aim:** To Determine the prevalence of burnout syndrome, psychological and musculoskeletal problems among healthcare providers due to the pandemic crisis **Methods:** A total of 100 participants will be recruited from aurangabad ; data collection shall be done by simple random sampling The patients with age 18 and above both male and female who are Healthcare worker from all the disciplines will be recruited, and the management including PG student , faculties, clinicians academicians researchers. The individuals who are Administrative assistant, non- health care professionals will be excluded.

Results and conclusion: After completion of the study

Keywords:

Burnout, Musculoskeletal Problems, Psychological Problems, Healthcare Professional, Pandemic Crisis, Developing Countries.



Impact of Pain Neuroscience Education Added as an Adjunct to Conventional Exercises on Pain and Pain Coping/Pain Behaviour in Patients with Non-Specific Neck Pain- A Rct



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Snehal Thote

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Abstract

Background: Non-specific neck pain (NSNP) is the most common musculoskeletal disorder occurring in the middle-aged people. PNE aims to explain to patients the biological and physiological processes involved in pain and, more importantly, to take the focus away from associated to anatomical structures such as muscles, cartilage, discs, and so on. PNE provides constraining evidence in pain reduction, improving function, pain catastrophization, and limitation of physical movement. PNE initially changes a patient's perception of pain.

Objective: this study was conducted to investigate the impact of pain neuroscience education as an adjunct to conventional exercises on pain coping behavior in NSNP.

Methodology: The study was a 2-week randomized controlled trial. A total of 61 patients within age group 18-40 years were included and assigned into two groups: GROUP-A were given conventional exercises(30 participants) and GROUP-B were given conventional exercises along with pain neuroscience education(31 participants). The severity of neck pain and fear of pain before the beginning of the treatment and at the end of 2-weeks were measured using visual analogue scale (VAS) and fear-avoidance belief questionnaire (FABQ).

Results: Yet to be calculated.

Keywords

Pain neuroscience education, Non-specific neck pain, Biopsychosocial model



Effect of Capsular Stretch and Scapular Stabilisation Exercises on Pain and Disability among Stage II Adhesive Capsulitis



Subha. S

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Abstract

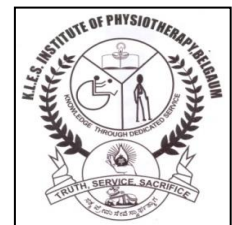
Adhesive capsulitis is a clinical condition characterized by gradual onset of shoulder pain with progressive limitation of both active and passive shoulder range of motion. Prevalence rate of frozen shoulder is 2% in the common population. Different treatment approaches have been advocated for Adhesive Capsulitis but there is not much evidence to support the definite protocol. Thus the aim of the study was to find the effectiveness of capsular stretch along with scapular stabilization exercises on pain and disability among stage II Adhesive Capsulitis. 15 subjects including both sexes between 40-50 years, diagnosed adhesive capsulitis were selected. They were given capsular stretching passively by the therapist and were asked to perform scapular stabilization exercises for two weeks daily. All the subjects were measured for pain and disability by SPADI on first day before starting treatment and after 2 week of treatment. Statistical analysis was done using paired t test. The outcome measure is SPADI. The statistical analysis showed significant difference after the consecutive 2 weeks of intervention. The capsular stretching and scapular stabilization exercises decreases pain and disability of shoulder.

Biography

SUBHA. S is a Master of Physiotherapy (Neurology) student at Meenakshi Academy of Higher Education and Research in Chennai. My Undergraduate studies were completed at ACS medical college in Chennai. “Comparative effect of Neuro developmental treatment vs Proprioceptive neuromuscular facilitation technique along with conventional exercises on upper limb function among stroke patients” completed thesis in 2019.



Assessment of Motor Function by Developing a New Programme in Community Dwelling Elderly-A Pilot Study



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Abstract

Background-Motor function includes balance, gait, and strength of the lower limb as the three main components. Motor dysfunction screening in the elderly is necessary as this helps in maintenance of public health, prevention and awareness of the risk factors in the community.

Objectives- The present study intended to identify elderly at risk for Motor dysfunction in the community by developing a new programme.

Methodology- Twenty-one Individuals (9 Male, 12 female) aged 60 years and above were assessed using Five minutes sit to stand test (FTSTST) for lower limb strength, mobility. The Functional Gait Index (FGI) assessed Balance, Gait and Older people's Quality of Life Scale-brief (OPQL-Brief) assessed Quality of Life.

Results- With p -value < 0.05 . One way ANOVA was used for Comparison of gender specific scores of FTSTST, FGI, OPQL-Brief which showed no significant difference in FTSTST and FGI scores but the OPQL-Brief scores were significantly higher in males ($p=0.0004$). Correlation analysis between age and all three outcome measures showed significantly positive correlation for FTSTST, and significantly negative correlation for FGI where as OPQL-Brief scale showed non significant negative correlation.

Conclusion- This study provides evidence that the new programme developed is effective in assessing motor dysfunction in community-dwelling elderly.

Keywords- Motor dysfunction, Community Elderly, Functional Gait Index, Five Times Sit to Stand.

Biography

I'm Vijayalaxmi Kanabur Presently pursuing Second year of Masters in Geriatric Physiotherapy from KAHER Institute of Physiotherapy. I Completed my Undergraduation from the same Institution in the year 2020. NeuroMuscular conditions in the elderly is my area of interest.



Slow Wave Enhancement and Neurophysiological Function in Depressed Older-Adults: An Event Related Potential Study



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Abstract

Depression accounts for greatest burden with about 1/3rd of elderly population being suffered from depression. Increased-depression severity has been linked to neurocognitive impairment. Aerobic exercise (AE) is a slow wave enhancement (SWE) technique, for improving neurocognitive function. However, studies suggesting the importance of AE to neurophysiological functions using event-related potentials-ERPs in depressed elderly are scarce. Therefore, aim of present study was to identify the potential benefits of AE on neurophysiological function using neurophysiological measures. Eighteen depressed older-adults (AE-group: $n=9$; control-group: CG: $n=9$) with age ≥ 60 years were recruited based upon inclusion-exclusion-criteria. AE group was subjected to eight-week-period AE program (3 times/week of 30 minutes-each-session) on treadmill at moderate intensity, determined using heart rate maximum (HRmax) during baseline-assessment. Progression of training intensity was 50% HRmax at 1st, 55% HRmax at 2nd, 60% HRmax at 3rd week, 65% HRmax from week 4 to 8. Pre and post training measures for neurophysiological function were tested by P300 (amplitude- μV and latency-ms). Significant improvements were observed as reduction ($P=0.02^*$) in P300-latency (pre = 305.36 ms and post = 273.14 ms) and increment ($P<0.001^*$) in P300-amplitude (pre = 3.98 μV and post = 6.33 μV) post-intervention in AE group. Results points increased cognitive-efficiency following 8 weeks of AE.

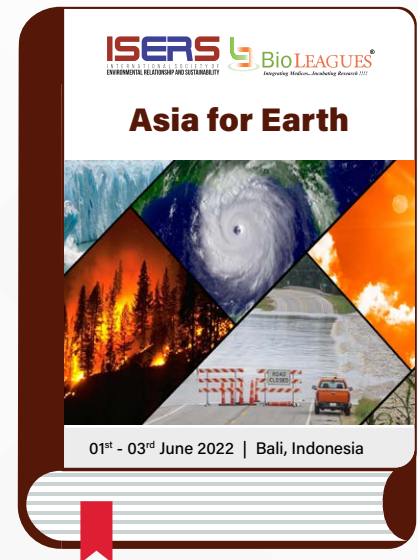
Keywords

aerobic exercise, event-related potentials, cognition, older adults, depression.

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