





Organized by DEPARTMENT OF PHYSIOTHERAPY

**Theme :** Recent Advancements in Rehabilitation

17<sup>th</sup>-18<sup>th</sup> June 2023



**AUDITORIUM, C-BLOCK** Sitapura Campus, Jagannath University, Jaipur









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# SOUVENIR

# Convener

# Dr. Kapila Jain (PT)

Head of Department, Physiotherapy



# About The University

Jagan Nath University, Jaipur has been established by an Act of the Rajasthan State Legislature (Act No. 19 of 2008) on April 16, 2008, approved under section 2(f) by the UGC Act, 1956, accredited by NAAC (2nd Cycle) with "A" grade in 2022 and is member of the Association of Indian Universities (AIU). The University has also acquired a distinctive status in agriculture education of having been accredited by ICAR for its B.Sc. (Hons.) Agriculture program.

The University is offering **UG and PG** programs in the areas of Engineering & Technology, Architecture, Management, Law, Agriculture Science, Pharmacy, Physiotherapy, Paramedical Sciences, Education and Vocational Studies. The **Ph.D.** programs are offered in select disciplines. The University has approval from various Statutory Regulatory Authorities (CoA, BCI, NCTE and PCI) for programs in respective disciplines.

The University has evolved a **comprehensive academic system** which incorporates the latest guidelines of NEP-2020 including CBCS, outcome based assessments, skill development, industry partnerships, holistic eco-system, research, extension activities with focus on promoting quality higher education and employability among students.

The University has signed **MoUs with various industrial and professional organizations** to promote industry integrations and for resource sharing to promote skill education and quality internships and placements. Effective teaching-learning process, adequate industry exposure, integration of skill education in curriculum design, holistic education, research and project based learning, outcome based assessments, etc. are the main pillars of academic system of this University.

To promote **student centric environment**, an essential policy framework has been put in place through establishment of Training and Placement Cell, Guidance and Career Council Cell, Anti-Ragging Cell, Gender Sensitization and Sexual Harassment Cell, Student Welfare Cell, Student Grievances Redressal Cell, SC/ST and OBC Cell and Minority Cell. Provisions for scholarships and free ships for students on merit-cum-means basis exist. Alumni Association has been registered and alumni meetings are organized regularly. The students do participate in various curricular and extra-curricular activities including sports, cultural festivals and celebration of national level festivals.

The academic system of the University is comprehensive, dynamic and vibrant incorporating the latest policy framework of the UGC and Ministry of Education, supported by state-of-theart infrastructure and extensive use of ICT resources for achieving objectives of quality education, employability, creativity, innovations and human values among learners to produce good citizenship and skilled manpower. The University aspires to be a centre of excellence for higher education in modern context in the years to come.



# About the Department

The faculty of Medical, Paramedical & Allied Health Sciences offers many programs for overall wellbeing. Healthcare professional works with people to identify and maximize their ability to move and function. And the functional movement is a key part of what it means to be healthy. This means that Healthcare professional plays a key role in enabling people to improve their health, well-being, and quality of life. Due to mechanization and sedentary lifestyles, people face many health problems and In curing out the disorders, the medical professionals work wonderfully.

# **Programmes Offered**

UG Programmes

B.P.T. - Bachelor of Physiotherapy

## PG Programmes

• <u>M.P.T. - Master of Physiotherapy</u>

## **Specialization Offered :**

- Orthopedic Physiotherapy
- Neurology Physiotherapy
- Sports Physiotherapy
- Cardio-pulmonary Physiotherapy
- Women Health Physiotherapy
- Pediatric Physiotherapy
  - MPT Dual Program Specialization In :
    - Musculoskeletal And Sports Physiotherapy
    - Neurology & Psychosomatic Disorders

Ph.D.

• <u>Ph.D in Physiotherapy</u>





# Message from Vice-Chancellor



Dear Colleagues and Participants,

It gives me pleasure to write this message for the Souvenir being published by the Department of Physiotherapy of the University on the occasion of 1st Physio Colloquium on Recent Advancements in Rehabilitation on June 17-18, 2023.

Keeping in view the fast growing popularity of physiotherapeutic treatment and the technological advancements in physiotherapy discipline, it becomes important for academics to update their knowledge and skills through common discussions on various emerging issues. I am sure this two days' Colloquium is going to be a highly rewarding experience for the participants.

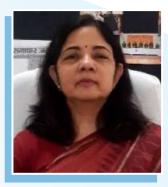
Jagan Nath University, in pursuance of its vision to develop it as a Centre of Excellence in higher education with focus on quality education, skill development, industry integration and holistic eco-system for global competencies, is continuously working towards quality enhancement initiatives and achievements. The University has been accredited by NAAC with 'A' Grade. All the programs offered by the University have approvals of their respective councils and other regulatory bodies. The main focus of the academic system of the University is on providing right type of education to students and preparing them to find respectable placements in their career and success in life. The emphasis of the system is on promoting multidisciplinary and outcome based education as per the NEP-2020 recommendations. Accordingly, a member of initiatives has been taken which include Choice Based Credit System, Skill Development Courses, Value Added Courses and Research projects. MoUs/Partnerships with industrial organizations for internships and placements, Career Guidance and Counseling Cell, Institutional Innovation Centre, foreign collaborations, ICT enabled classrooms for blended mode of learning and digital library are available.

The publication of the Souvenir would help provide a tool for coordinated efforts by students, faculty members and other stakeholders towards the successful conduct of 1st Physio Colloquium at Jagan Nath University, Jaipur.

I wish a great success to the Department of Physiotherapy for the Colloquium on Recent Advancements in Rehabilitation.

Prof. H. L. Verma Vice-Chancellor Jagannath University, Jaipur

# Message from Pro Vice-Chancellor



It is a matter of great pleasure that Department of Physiotherapy is organizing 1<sup>st</sup> Physios Colloquium on "Recent Advancements in Rehabilitation". It gives me immense pleasure to congratulate the department for conceiving and implementing such a relevant theme for the colloquium.

It will hopefully provide a fresh and incisive vision to the process of Rehabilitation in the country. The rapid advances in this field and more so post pandemic have necessitated the need to ponder over knowledge and skills needed. This kind of platform provides a broad canvas in the field of academia to brainstorm and develop the best practices concerning rehabilitation.

I hope the conference enhances professionalism and capabilities of all the participants which promotes towards the future advancement of their profession.

I wish the conference a great success and prosperous future of the Professionals attending the Conference.

Best Wishes Prof. (Dr.) Vaishali Sharma Pro Vice-Chancellor Jagannath University, Jaipur

# Message from the Desk of Registrar



Dear Colleagues and Participants,

It is with great pleasure that I welcome you all to the upcoming Physiotherapy Colloquium organized by the Department of Physiotherapy. This event provides an opportunity for physiotherapy professionals to come together and share their research, experiences, and knowledge on the latest developments in the field of physiotherapy specially on the theme "Recent Advancement in Rehabilitation"

As the registrar, I am honoured to be a part of this colloquium. I believe that the research presented at this event will be beneficial to the physiotherapy profession, healthcare system, and ultimately, to the patients that we serve.

This year's colloquium includes an excellent line-up of renowned speakers who will present on a variety of topics including the latest trends in rehabilitation .There will also be interactive and hands-on workshops where participants can gain practical knowledge and experience on the theme.

Moreover, the event offers a great opportunity for participants to connect with colleagues, engage in networking sessions, and create lasting professional relationships.

We believe that the Physiotherapy Colloquium will be a platform that will enrich and inspire the participants from academia, clinical practice, and research.

At the end, I would like to express my gratitude to the organizing committee, volunteers, sponsors, all the participants, and the guest speakers for their contribution and support.

Once again, I welcome all the participants to this great event. I wish you all a fruitful and informative experience.

Tanmay Pattanayak Registrar, Jagan Nath University

# Conference Convener



I Dr. Kapila Jain convener of this conference would like to extend my warm welcome to all of the presenters, participants, and in particular, I would like to express my sincere gratitude to our plenary & invited speakers.

This conference is organised by the Department of Physiotherapy, Jagannath University, Sitapura, Jaipur and is intended to be the first step towards a top class conference of Physiotherapy. I believe that this platform will give opportunities of sharing and exchanging original research ideas & opinions, gaining inspiration for future research and broadening knowledge about advancements in Rehabilitation.

There will be plenty of knowledge enhancing activities such as Quiz competition, scientific poster, scientific paper competition for students and an esteemed member of panelists will be the judges for these activities. The main outcome of this conference is to come up with national and international framework for the field of physiotherapy in future.

The crux of this conference will focus on the development of new treatment or rehabilitation protocols and for the very first time there will be a Oath ceremony for physiotherapists in history of Rajasthan's conferences. I hope these two- day conference would help students expand their mental horizon therefore i request all the delegates / students from across the country to make use of these two days to the best of their abilities.

I also want to express my sincere appreciation to the members of the program committee for their critical reviews of the submitted papers, as well as the organising committee for the time and energy they have devoted in arranging the logistics of holding this conference.

> Warm Wishes, Dr Kapila Jain Conference convener Head Department of Physiotherapy

# Message From Organising Secretary



As a Organizing Secretary, I want to extend a warm greeting and express my gratitude for your participation in this esteemed event.

The conference promises to be a dynamic platform for the exchange of knowledge, ideas, and insights. We have curated an exceptional lineup of renowned speakers, experts, and researchers who will deliver thought-provoking talks and engage in meaningful discussions.

Throughout the event, you will have the opportunity to connect with fellow professionals, expand your network, and foster collaborations that can drive impactful outcomes in your respective fields. We encourage you to actively participate in the various sessions, workshops, and interactive activities planned to maximize your conference experience.

Thank you for your commitment towards advancing 1st PHYSIOS COLLOQUIUM 2023 and for contributing to the success of this conference. We look forward to your active involvement and fruitful discussions that will shape the future of our industry.

Wishing you a memorable and enriching conference experience!

Best regards, Dr. Shephali Dabral Organizing Secretary

# Message From Co-Organising Secretary



Dear Participants,

I hope this message finds you in good health and high spirits. As the Co-Organizing Secretary of the upcoming conference, I am excited to extend my warmest welcome to all of you.

Our aims to bring together experts, researchers, and enthusiasts from various fields to exchange knowledge, share insights, and foster collaborations. We have curated an enriching program encompassing a wide range of topics. The conference will feature keynote speeches, panel discussions, paper presentations, and interactive workshops, providing ample opportunities for intellectual discussions and networking.

I want to express my gratitude to the organizing committee, our sponsors, and our esteemed speakers for their valuable contributions and support in making this conference a reality. Without their dedication and expertise, this event would not be possible.

We understand the challenges posed by the recent pandemic, and we are committed to ensuring the safety and well-being of all participants. Rest assured, we will be implementing strict health and safety protocols in accordance with the guidelines provided by local health authorities.

Once again, on behalf of the organizing committee, I extend my warmest welcome to all participants. We are excited to have you join us at this conference and contribute to its success.

Should you have any questions or require any assistance, please don't hesitate to reach out to our conference secretariat. We are here to support you in every possible way.

Looking forward to meeting you all soon!

Best regards, Dr. Hemant K Gurjar Co-Organizing Secretary



# Message From Scientific Committe Head



Dear Esteemed Colleagues,

On behalf of the scientific committee, it is with great pleasure and excitement that I welcome you to Ist PHYSIOS COLLOQUIUM 2023. This event serves as a platform for passionate professionals like yourselves to gather and share the latest advancements in our field. Physiotherapy plays a pivotal role in improving the lives of individuals, enhancing their mobility, and restoring their overall well-being. It is through collaboration, research, and continuous education that we can expand the horizons of physiotherapy and unlock new frontiers in patient care.

I encourage all attendees to actively participate in the interactive sessions, engage in meaningful discussions, and take advantage of the networking opportunities. Let us leverage our collective knowledge and expertise to inspire innovation, foster collaboration, and ultimately improve patient outcomes.

I hope that this conference serves as a catalyst for new ideas, lifelong learning, and enduring professional connections. May it inspire you to continue pushing the boundaries of physiotherapy, enriching the lives of your patients and the communities you serve.

Wishing you a fulfilling and inspiring conference experience.

Sincerely Dr. Samriti (PT) Scientific Head

# Message From Treasurer



I am delighted to share that this is the first national conference to be conducted in Jagannath University by Department of Physiotherapy following the theme "RECENT ADVANCEMENT IN REHABILITATION". Rehabilitation is a stream of medicine that works on the functions and quality of life by reducing disability in individuals. After the outbreak of Covid-19 rehabilitation is a necessity. At some point anybody may need rehabilitation for treatment or to improve the quality of life. We are obliged to organize this Physios Colloquium where different students, clinicians and academicians are going to represent Physiotherapy who belong from different area, state and culture. Various renowned speakers are going to connect with with on one stage who are experts in clinicals as well as in research. The scientific sessions will be knowledgeable for every participants with new advancements in the field of physiotherapy. With quiz competition participants are going to expand there knowledge and will embrace the art and creativity by poster presentation. With paper presentation, you can not only acknowledge your work/research but it will improve your confidence.

I look forward to meet the participants, guests, respected speakers and our alumni in the conference. Hoping for the best in the conference.

Regards Dr. Prachi Berwal (PT) Assistant Professor Treasurer

# 1<sup>ST</sup> PHYSIOS COLLOQUIUM 2023

# 17<sup>th</sup> & 18<sup>th</sup> June 2023

# Day 1

## **PRE-LUNCH**

### REGISTRATION

07:30 am - 09.30 am	-	Breakfast
09:30 am - 10.00 am	-	Welcome Ceremony
10.00 am - 10.30 am	-	1st Speaker
10.30 am - 11.00 am	-	2nd Speaker
11:00 am - 11.30 am	-	3rd Speaker
11:30 am - 12:30 pm	-	4th Speaker
12:00 am - 01.00 pm	-	5th Speaker
01.00 pm - 02.00 pm	-	6th Speaker

### LUNCH

## **Post-Lunch (Auditorium)**

Post-Lunch (Department of Physiotherapy) Poster, Paper, Quiz

06:00 pm - 09:00 pm	DJ Dinner
	Briefing of next day
04:00 pm	Closing Ceremony and
03:30 pm - 4:00 pm	10th Speaker
03:00 pm - 3:30 pm	9th Speaker
02:30 pm - 3:00 pm	8th Speaker
02:00 pm - 2:30 pm	7th Speaker

# Day 2

08:30 am - 09.30 am	-	Breakfast
10.00 am - 10:30 am	-	Welcome and Briefing
10.30 am - 11.00 am	-	1st Speaker
11:00 am - 11.30 am	-	2nd Speaker
11:30 am - 12:30 pm	-	3rd Speaker
12:00 pm - 12.30 pm	-	4th Speaker
12:30 pm - 01:30 pm	-	Award Ceremony
01:30 pm	-	Lunch
02:30 pm - 04:30 pm	-	Oath Ceremony

# 1<sup>ST</sup> PHYSIOS COLLOQUIUM 2023

**THEME : RECENT ADVANCEMENTS IN REHABILITATION** 

# 17<sup>th</sup>-18<sup>th</sup> June 2023

Venue : **AUDITORIUM, C-BLOCK** Sitapura Campus, Jagannath University, Jaipur







# CONVENER Dr. KAPILA JAIN (PT) Head of Department Physiotherapy



ORGANISING SECRETARY DR. SHEPHALI DABRAL (PT)

CO-ORGANISING SECRETARY DR. HEMANT K GURJAR (PT)





JOINT SECRETARY DR. SAMRITI (PT)

JOINT SECRETARY DR. HARSHITA DADHICH (PT)





TRESEURER Dr. PRACHI BERWAL (PT)



Conference Committee



Rakesh Israni



Mayank Mathur



Dharmraj Sharma



Pooja Kudesia



Dr. Shilpli Khandelwal



Dr. Shweta Bhatia

Inderjeet Khinchi



Smita Sharma



Virendra Jain





Dr. Deepika Taparia

Dr. Rajeev Ranjan



Abhishek Bishnoi



Sanjeev Kumar



Hemant Agrawal



# 1<sup>ST</sup> PHYSIOS COLLOQUIUM 2023



# **RECENT ADVANCEMENTS IN REHABILITATION**

# **CONFERENCE HIGHLIGHTS**

- Eminent Key Note Speakers
- Special Talk Session by Renowned Professionals (in Oath Ceremony)
- Souvenir
- Certificate with Credit hours from University
- Pre-Conference Kit with Certificate & Credit Hours
- D.J. Night & Gala Dinner (17th June 2023 Time 7:00-10:00 pm)
- Cash Prize & Award with Certificate to Winners
- Paper Presentation
- Poster Presentation
- Quiz competition

# EMINENT SPEAKERS 17<sup>th</sup>-18<sup>th</sup> JUNE 2023



# Dr. Ali Irani

Head of Department-Physiotherapy, Sports Medicine & Rehabilitation Centre Nanavati Superspeciality Hospital, Mumbai

# Topic BRAIN MAPPING



Dr. Thiagarajan Subramanian Professor Lovely Professional University Punjab





# Dr. Bhavana Gadhavi

Dean and Principal Parul Institute of Physiotherapy, Vadodara

## Topic

NOCIPLASTIC PAIN - NEW REHABILITATION PERSPECTIVES

Topic IMPLICATIONS OF KINETIC CHAINS IN REHABILITATION

## **Dr. Manoj Malik** PhD, Assistant Professor, Department of Physiotherapy GJUS&T





# **Dr. B S Motimath**

Professor and Head of the department KLE Institute of Physiotherapy Topic RECENT ADVANCES IN REHABILITATION

Hisar, Harvana

### Topic RECENT ADVANCES IN REHABILITATION

# Dr. Arati Mahishale

Prof. & Head Dept. of OBG Physiotherapy Kaher Institute of Physiotherapy, Belgaum





# Dr. Sunita Patel

Pelvic Floor Rehab Expert & International Educator, IHFA

# Topic

IMPORTANCE OF PELVIC FLOOR REHABILITATION



# **Dr. Dhaval Chivate**

Assistant Professor, KLE Institute of Physiotherapy

# Topic

NEW ERA IN REHABILITATION AQUATIC THERAPY

PHYSIO VERSION 2.0 : LATEST UPGRADATIONS TO BECOME A NEXT LEVEL PHYSIOTHERAPIST

# Dr. Harsh M Rajdeep

MPT (Sports Physiotherapy & Rehabilitation) FRHS, MIAP, AMIOA





# Dr. Jagpreet Singh (PT)

MPT (Sports), Fellowship in geriatric care Certification in Podiatry Physiotherapy, Head of Dept.-Physiotherapy Mansarovar Global University

# Topic

IMPORTANCE OF FOOT ASSESSMENT AND MANAGEMENT



# Dr. Richa Singh (BPT, IIM Bangalore)

(BPI, IIM Bangalore) Founder, Perfect Bounce

# Topic

FUTURE OF DIGITAL HEALTHCARE IN RURAL INDIA

# Topic

GYNOID OBESITY HACKS : AN ULTRASONIC CAVITATIONAL APPROACH

# Dr. Manisha Saharan

Ph.D., MPT, FIMT, PGDBS Director- Physio Healing Physiotheropy Clinic & Slimming Centre





# Dr. Nitu Verma (PT)

Director at Life 360 Chiropractic Osteopathy Cranio-Sacral Therapy Physiotherapy Clinic

# Topic

WITH ALL ADVANCEMENTS IN PHYSIOTHERAPHY, HOW TO MAKE YOURSELF MOST VALUABLE & PRICELESS

Topic

INSOMNIA: ESSENTIALS FOR PHYSIOTHERAPIST

# Dr. Himanshu Sharma

Member of American Academy of Sleep Medicine Director - Swarnagiri Physiotherapy and Neuro Rehab Centre, Kota



# 1<sup>ST</sup> PHYSIOS COLLOQUIUM 2023



# **RECENT ADVANCEMENT IN REHABILITATION**

# **DEPARTMENT OF PHYSIOTHERAPY**

# Cordially Invites you for the **OATH CEREMONY**

GHanaurable Guest

# **DR. SUNITA SHARMA**

(Dean Academics, Rajasthan University of Health Sciences, Jaipur)

& (All respected Dean's/Principal/H.O.D's/ Seniors Academicians of the Physiotherapy Institutions-Pan India)

18th June 2023 at 2:00 pm

at **AUDITORIUM, C-BLOCK** Sitapura Campus, Jagannath University, Jaipur

# Scientific Committee

- Dr. Sunita Sharma
- Dr. Saleem Akthar Naqvi
- Dr. Ajeet Saharan
- Dr. Pallav Bhatnagar
- Dr. Shailendra Mehta
- Dr. Madhusudan Tiwari
- Dr. Mahesh Sahu
- Dr. Kalpana Zutshi
- Dr. Jitendra Munjal
- Dr. Anchit Gugnani
- Dr. Dhruv Taneja
- Dr. Deepak Sharma
- Dr. Ankit Bhargava
- Dr. Vishal Jain
- Dr. Aditi Singh
- Dr. Deepak Singh
- Dr. Atul Singh
- Dr. Bhanwar Singh Takhar
- Dr. Kushal Tiwari
- Dr. Bhupesh Goyal
- Dr. Deepak Sharma
- Dr. Vishal Jain

- Dr. Atul Singh
- Dr. Himanshu Sharma
- Dr. Yamuni Bhandari
- Dr. Monika Suthar
- Dr. Bhagyashree Panda
- Dr. Aniket Solanki
- Dr. Subha Sogani
- Dr. Vikas Mathur
- Dr. Amit Gupta
- Dr. Upendra Agrawal
- Dr. Ashish Yadav
- Dr. Rajeev Khichi
- Dr. Rakhi Shivkumar
- Dr. Suryakant Agnihotri
- Dr. Abhishek Yadav
- Dr. Bhupendra Bathri
- Dr. Anil Jaiswal
- Dr. Ashutosh Kumar
- Dr. Vivek Dhariya
- Dr. Bhushan Dahikar
- Dr. Sudesh Chettri

Conference Ca-ardinatars



Ambika Nehra President



Suhesh Mathur President



Ashok Kumar Head Coordinator



Rajnesh Dhaka Social Media Co-ordinator



Paramjeet Kumar Registration Co-Ordinator



Shivangi Singh Stage Co-ordinator



Dhanajay Food & Medical Co-ordinator



Tanay Bhardwaj Scientic Committee Co-ordinator



Arvind Nair Cinematography Co-ordinator



Babita Patidar Certificates Co-ordinator



Yashika Basur Quiz Co-ordinator



Pooja Kumari Decoration Co-ordinator



Akansha Jain Paper Co-ordinator



Bulbul Sharma Poster Co-ordinator

# **CALL FOR PAPERS**

Post-graduates, academicians & ph.D. Scholars registered for the conference are invited to submit their abstract

**Guidelines**:

- 1) Abstract should be 250 words maximum.
- 2) Abstract must include: Title, Background, Mentodology, Results & Conclusion
- Name and affiliation of all the authors need to be mentioned, along with mail id & contact no of corresponding authors
- 4) Max. 3-5 Key words are allowed
- 5) For the presenting, PPT format will be used. max 8-10 slides are preferable
- 6) The presenting author needs to submit a hard copy of their study at the time of registration on day 1
- Font: Times new roman titel- in bold with size 14, rest abstract size 12
- 8) The total presentation duration will be 10 minutes, consisting of a 8-minuts presentation followed by a-2 minute question round.

# **QUIZ COMPETITION**

# **Rules and Regulation**

- The quiz will be conducted in teams.
- A maximum of 2 teams are allowed from each College/University.
- Each Team consists of 3 members, including the 1st and 2nd year students
- Questions will be strictly basrd on the subjects that have
- been taught in the 1st and 2nd years of physiotgerapy
- There will be 3 rounds:
- Buzzer round Elimination round Rapid fire
- The decision of the judge will be final and will not be subjected to any change

# **POSTER COMPETITION**

# **Guidelines:**

- Maximum 2 entries are allowed from each collage/ university
- Maximum Number of participants for a single poster is 2
- Taxt in the poster shall be in english
- Use a cambination of taxt & Images. A large amount of taxt in not preferred.
- poster size should be 3'x3 or 3'x4' maximum.
- The entire poster must be on flex with frame or on Hard Board, any other mention is not allowed for presentation
- mention the poster title on the top & presenter's name in the bottom right corner.
- Visuals should be simple, attractive & bold. Remove any unnecessary details
- The total presentation duration will be 8 minutes, consisting of a 6-minute presentation followed by a 2- minute question round.

### 1. Functional Capacity and Quality of life Among Pulmonary Tuberculosis Patients after One Year of Pulmonary Rehabilitation Program: A Randomized Control Trial Author's Affiliation Dr. Munazzah Orooj, Assistant Professor, Mahatma Gandhi Physiotherapy College, Mahatma Gandhi

# University, Jaipur

**Background & Objective:** Tuberculosis (TB) is still a worldwide public health burden, as more than 1.3 million deaths are expected to be reported in 2021. Despite microbiological cure, PTB sequelae are associated with extensive residual lung damage, markedly reduced functional capacity, and quality of life. There are lack of protocols regarding pulmonary rehabilitation in TB More research is needed for evidence-based practice. Therefore the aim of the present study is to evaluate functional Capacity and Quality of life Among Pulmonary Tuberculosis Patients after One Year of a Pulmonary Rehabilitation Program

**Material & Methods:** Forty-Five patients were randomly allocated to the Pulmonary Rehabilitation group, which comprised of supervised endurance training, resistance training, breathing exercises, self-management, and education. The other 45 patients were allocated to the control group, who were asked to continue their usual routine strategies for four weeks. All measurements about functional capacity and quality of life were made at enrolment and after completing 8 weeks of Pulmonary Rehabilitation and 12 months using the Six-minute walk test (6MWT) and Saint George respiratory Questionnaire respectively.

**Results:** There was a significant improvement in 6MWD m (p = 0.001) and 6MWD percentage predicted (p = 0.001) in the PR group compared to the control group. Also all the domains of SGRQ showed significant improvement post-PR.

**Conclusion**: Findings of the present study demonstrate that 24 sessions of PR program in pulmonary tuberculosis patients result in favorable changes in functional capacity, health-related quality of life whose benefits were maintained at one-year follow-up.

Keywords: Functional capacity, Pulmonary Rehabilitation, Pulmonary Tuberculosis, Quality of life,

## 2. Knowledge of bolero basic steps for balance training among clinical physiotherapists Pushpendra singh Rajput, Dr. Vaishali Suthar, (MPT- Neurosciences), Ahmedabad, Gujrat

- Email id: hollowcryptic@gmail.com
- Contact no. : 8128377058

Address: Ahmedabad Institute Of Medical Sciences

### **Background**:

Stroke is the leading cause of non-traumatic disability in adults, with balance and gait disturbances representing the main limitations of body functions. Bolero balance therapy has shown positive effects in older adults and in patients with neurological pathologies, specifically on functional gains of gait and balance. The study aimed to investigate the awareness of bolero balance training among Clinical Physiotherapists.

### Methodology:

The study includes clinical physiotherapists who answered an online questionnaire via a google form on their awareness and knowledge about bolero basic steps for balance training.

### Result:

Statistical analysis was done with Microsoft excel version. 16.0. About 96.2% Clinical physiotherapist are treating individuals with balance difficulty but 71.2% are aware of bolero balance training. Despite being aware of bolero balance training only 29.5% respondent are knowing actually how to perform bolero balance training. Whereas, 93.2% respondents are willing to know further about bolero balance training and apply to balance rehabilitation.

### **Conclusion**:

Majority of the clinical physiotherapists are aware about bolero balance training but many of them were lacking the knowledge of bolero balance training. More emphasis is given for knowledge about bolero basic steps for balance training.

### Keywords:

Bolero balance training, dance therapy, stroke rehabilitation

### 3. Knowledge and Perception about Chedoke Arm and Hand Activity Inventory among Clinical <u>Physiotherapists</u>

### **Background:**

The development of the CAHAI was based on the constructs of motor return and function in the upper limb following stroke. A research team of physiotherapists and occupational therapists selected the 13 items that form the CAHAI-13 from an extensive list of tasks that were generated from the literature and a survey of people with stroke in Canada. The final 13 items represent meaningful everyday activities, focussing on the bimanual nature of most tasks. They include a range of characteristics of the upper limb, including strength, dexterity, coordination, and grasp. The CAHAI-13 takes approximately 25 minutes to administer. A CAHAI 7, 8, and 9 have been developed with an aim to shorten this administration time and improve clinical and research utility. The study aimed to investigate the awareness and perception of Chedoke Arm and Hand Activity Inventory among Clinical Physiotherapists.

### Methodology:

The study includes clinical physiotherapists who answered an online questionnaire via a google link on their awareness and perception of CAHAI in their clinical practice.

### **Result:**

Statistical analysis was done with Microsoft excel. Clinical physiotherapists who are practising with experience below 3 years are more aware of CAHAI. Majority of the respondents (73.5%) are aware of CAHAI. Despite being aware on CAHAI, 67.3 % of respondents reported not applying for evaluation. 33.3% of them are working in private hospitals who are more aware of CAHAI.

### **Conclusion:**

Majority of the clinical physiotherapists are aware of CAHAI. However fewer are not applying it for evaluation. More emphasis can be given to it for PTs as it is inexpensive and easy to evaluate.

### 

# 4. STUDY TO FIND THE LEVEL OF SATISFACTION IN INDIVIDUALS USING LOWER LIMB PROTHESIS.

### **BACKGROUND:**

Satisfaction is an important factor for the successful use of the assistive device. The use of lower-limb prosthesis restores functional mobility and improves quality of life for people with lower-limb amputation. However, the use of prosthesis is significantly impacted by user's satisfaction with their prosthesis and service delivery. The role of the therapist is to rehabilitate the prosthetic user to gain independence in their daily living activities. Understanding the satisfaction levels of these users with their assistance devices will be useful to better facilitate this goal. Thus, to fulfil this need, the following study evaluates the satisfaction level within prosthetic users by utilizing Quebec User Evaluation of Satisfaction with Assistive Technology (A-QUEST 2.0).

**METHODOLOGY:** Study was conducted among lower-limb prosthetic users. The Quebec User Evaluation of Satisfaction with Assistive Technology (QUEST) questionnaire was used.

RESULT: Statistical analysis was done with Microsoft excel. Total 22 participants out of which 5 females and 17 males were include.77.27% of participants were satisfied and 22.73% were less satisfied.

**CONCLUSION :** The study concludes that majority of lower-limb prosthestic users were satisfied with their prosthesis and service delivery.

### 5. KNOWLEDGE AND AWARENESS ABOUT HUMAN PAPILLOMA VIRUS AND ITS VACCINATION AMONG YOUNG ADULTS

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**BACKGROUND-**Human papillomavirus (HPV) is a prevalent sexually transmitted infection that can lead to various types of cancers, including cervical, anal, penile, and oral cancers. To combat the burden of HPV-related diseases, HPV vaccination has emerged as a crucial preventive measure yet lack of awareness about HPV and absence of effective vaccination programs leads to rise in mortality rates in the country.

**METHODOLOGY-**This cross-sectional study aims to evaluate the awareness of HPV and its vaccination among young adults aged 18 to 26 from various colleges in Ahmedabad, India. A survey was conducted on a sample of 124 individuals, utilising a structured questionnaire comprising questions related to awareness about HPV and HPV vaccination, consisting 81 females and 43 males.

**RESULTS-**The findings revealed that 83% of females and 44% of males reported prior knowledge of the virus. Additionally, it is worth mentioning that only 56.4% heard about HPV vaccination. Furthermore, the study also shed light on the prevailing negligence towards HPV vaccination within the surveyed population as only 13.7% are vaccinated.

**CONCLUSION-** The study highlights that there is a positive response regarding HPV awareness among young adults, although the lack of awareness about the HPV vaccine and the low vaccinated population pose significant challenges.

KEYWORDS- HPV VACCINATION, AWARENESS, KNOWLEDGE, YOUNG ADULTS

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### 6. EFFECTS OF MULLIGAN BENT LEG RAISE AND TRACTION STRAIGHT LEG RAISE ON HAMSTRING FLEXIBILITY AND LUMBAR SPINE MOBILITY IN FEMALE MARATHON RUNNERS: A RANDOMISED CONTROLLED TRIAL

Dr. Basavaraj Motimath 1, Ms. Diksha Mushtigeri2, Dr. Dhaval Chivate3

**Background:** The hamstrings are an important muscle in running, but they tend to be neglected by runners in terms of stretching and strengthening. A tight hamstring is often the result of not stretching before running and could be indicative of strain. Brian Mulligan has developed most brilliant compilation of manual techniques such as Bent Leg Raise and Traction Straight Leg Raise in hamstring flexibility.

Objectives: To determine and evaluate the effects of Mulligan Technique on Hamstring Flexibility and Lumbar Spine Mobility in Female Marathon Runners.

**Methods :** Total number of 45 female marathon runners age 19-35 years were included and were divide into three groups of 15 each by simple random sampling Group A, B and C. Subjects in Group A received Bent Leg Raise technique, Group B received Traction Straight Leg Raise, and Group C received static stretching. Participants were assessed for hamstring tightness with Active Knee Extension Test (AKET) and lumbar mobility was assessed using Modified Modified Schober Test (MMST) and immediately assessment was done on pre and post intervention.

**Results:** Statistical analysis was done using SPSS version 23. Normality of data was checked using Shapiro-wilk test. Paired Simple t test was used within the group analysis and One Way Anova was used for between group analysis which showed AKE RIGHT ( $3.07\pm1.28$ ), AKET LEFT( $3.13\pm1.30$ ), MMST ( $1.2\pm0.68$ ) of Group A as compared to Group BAKE RIGHT ( $0.00\pm1.56$ ), AKET LEFT ( $0.67\pm1.40$ ), MMST ( $0.60\pm0.51$ ) and Group CAKE RIGHT ( $2.00\pm1.20$ ), AKET LEFT ( $1.67\pm1.54$ ), MMST ( $0.33\pm0.49$ ).

Conclusion: This study showed significant improvement in Group A, Group B and Group C. But when compared between groups Group A (Bent Leg Raise) statistically showed better results than Group B (Traction Straight Leg Raise) and Group C (Static Stretching).

**Keywords:** Bent Leg Raise, Traction Straight Leg Raise, Hamstring Tightness, Active Knee Extension Test, Modified Modified Schober's Test.

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### 7. PREVALENCE OF URINARY INCONTINECE AMONG MIDDLE-AGED MALES WITH TYPE-2 DIABETES MELLITUS.

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**BACKGROUND-** Diabetes mellitus (DM) is one of the most common chronic metabolic disorders affecting individuals worldwide, with rising incidence and prevalence. One of the complications caused by diabetes is urinary incontinence (UI) which is defined as any involuntary leakage of urine. Urinary incontinence often goes unreported to healthcare providers, and diabetes often is underdiagnosed which can significantly impact individual's daily living. This study aims to find the prevalence of Urinary Incontinence (UI) in males with Type 2 Diabetes Mellitus (T2DM) and also to understand the severity, frequency and type of UI in the same.

**METHODOLOGY-** This was cross-sectional study conducted in sola civil hospital of Ahmedabad, India in which male aged 40-60 years with T2DM were enrolled. UI was assessed using International Consultation on Incontinence Questionnaire Short Form (ICIQ-SF).100 participants with T2DM were included in study depending on inclusion and exclusion criteria.

**RESULT-** Findings shows 13subjects to have UI. Furthermore, majority of subjects appears to have urge UI (38.5%) with moderate severity accounting for 53.8%.

CONCLUSION-The study suggests that prevalence rate of UI in males with diabetes is 13%, with varying degrees of severity which can significantly impact individual's life. These findings highlight the need for increased awareness, early detection and intervention to address the UI in males.

Keywords- urinary incontinence (UI), type 2 diabetes mellitus(T2DM), ICIQ-SF.

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### 8. CORRELATION BETWEEN DYNAMIC BALANCE, LOWER LIMB MUSCLE POWER, AND SPEED PERFORMANCE IN SPRINTERS: A CROSS-SECTIONAL STUDY

Dr. Dhaval Chivate1 Mr. Chakkalathy Shaun Robby2 Dr. Basavaraj Motimath3

**Background :** The basic principles of sprinting are straightforward, but the way that an athlete overcomes the mechanical constraints during a sprint is a complex process. Balance and muscle power are key components for executing such complex sports skills. The current study intends to determine the correlation between dynamic balance, lower limb muscle power, and the speed of sprinters.

**Methodology :** In this observational study, 75 sprinters between the ages of 18-30 years from various sports academies and sports clubs in Belagavi city were recruited. Dynamic balance was measured using the modified Star Excursion Balance Test and Multiple Single Leg Hop Stabilization Test, speed was measured using the 30m Sprint Test and muscle power was measured using Sargent Jump Test.

**Results :** Statistical analysis was done using SPSS software version 26. The Pearson Correlation coefficient was used which indicated that dynamic balance and muscle power were negatively correlated with speed. The results were statistically not significant.

Conclusion: The study suggests that with an increase in dynamic balance and muscle power, sprint time decreases.

Keywords: dynamic balance, speed, sprinters, vertical jump

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### 9. PREVALANCE OF MEDIAL TIBIAL STRESS SYNDROME IN MIDDLE AGE MARATHON RUNNERS: AN OBSERVATIONAL STUDY

### Dr DHAVAL CHIVATE1, RISHI JAIN2, Dr BASAVARAJ MOTIMATH

**Background:** As suggested in previous studies the most common lower extremity injury is "shin splints" and medial tibial stress syndrome (MTSS) which is one of the leading causes of leg pain in marathon runners. To create preventive measures, a thorough understanding of the factors that raise the risk of developing MTSS is necessary that can be ideally modifiable and in current study target population that has not been subjected to any previous research. The paucity of available research makes it necessary to investigate the occurrence of medial tibial stress syndrome in middle-aged marathon runners.

Aim - To determine prevalence of medial tibial stress syndrome in middle age runners using medial tibial stress syndrome score.

**Methodology :** In this study, 96 middle age runners were randomly selected using probability sampling participants were assessed for medial tibial stress syndrome using MTSS Questionnaire the data was obtain interpreted and analysed using SPSS software.

**Result :** The statistical analysis was done using SPSS software version 26 The Pearson correlation coefficient was used to calculate to find the correlation between age R (-0.74) height R (-0.191) weight R (-0.91) gender R (0.117) in relation with mtss and results shows negative correlation.

Conclusion: The results show that prevalence of medial tibial stress syndrome in middle age marathon runners is 7.29% and it also shows negative correlation between age gender height weight in relation with Mtss questionnaire.

Key words: Medial tibial stress syndrome, Marathon runners, prevalance

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### 10. EFFECT OF CLOTH MASK VS N95 MASK ON HEMODYNAMIC PARAMETERS, OXYGENATION AND PEFR AT REST AND DURING PHYSICAL ACTIVITY IN HEALTH CARE PROVIDERS- A CROSS OVER DESIGN

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**BACKGROUND:** Present study aimed to evaluate the effect of cloth mask vs N95 mask on cardiovascular and pulmonary parameters at rest and during physical activity in health care-providers.

**METHODS:** Hundred health care-providers (45 males,55 females) were included in the study. The procedure comprised of pre-test and post-test outcome measures like hemodynamic parameters comprising of heart rate,[15] respiratory rate[16], peak expiratory flow rate[7] and oxygen saturation[7] taken on first day with cloth mask and second day with an N95 mask consecutively. Outcome measures were measured during quite sitting and brisk walking on treadmill, which was a self-paced test. Subjects manually selected their comfortable speed while walking on the treadmill, when exhausted the test was terminated. Comparing values of the outcome measures we found the effect of N95 masks and cloth masks on hemodynamic parameters, oxygenation and peak expiratory flow rate during rest and physical activity.

**RESULTS:** Present study resulted in favour of N95 masks (p<0.05). The difference was significant, concluding a slight increase in the respiratory rate(p=0.0009) and heart rate(p=0.0001) while wearing a cloth mask in comparison with an N95 mask. Oxygen saturation and peak expiratory flow rate were significantly maintained during physical activity while wearing an N95 mask, compared to a cloth mask (p=0.0001).

**CONCLUSION :** N95 masks should be utilized by health-care providers as, they did not impair respiratory rate, heart rate, oxygenation and peak expiratory flow rate at rest and during physical activity. In comparison with cloth masks, N95 masks were better in maintaining oxygen saturation and peak expiratory flow rate during physical activity.

### 11. KNOWLEDGE AND AWARENESS ABOUT PHYSIOTHERAPY AMONG STUDENTS OF HIGHER SECONDARY SCHOOL IN AHEMDABAD RURAL

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UNIVERSITY: Gujarat University

BACKGROUND: Physiotherapy is in existence in India in the last 5 decades but it has been observed in last 5-6 years that number of students pursuing physiotherapy as their career is declining as well as number of physiotherapy students and professionals continuing the profession is also declining. The purpose of our study is to find out awareness knowledge of physiotherapy among higher secondary students & perseverance among students & professionals in physiotherapy

PURPOSE OF THE STUDY: The aim of this study was to assess the knowledge and awareness about physiotherapy among higher secondary school student in Ahmedabad rural area

**METHODOLOGY :** This study was conducted with 200 participants with a survey questionnaire which consist. Part A consisted of subjective information of the students including gender, grade, field study. Part B consisted of seven close ended questions which had four sub questions under each to evaluate the awareness about physiotherapy. Part C consisted question with multiple responses to identify the source of information regarding physiotherapy. Analysis will be done using appropriate statistical tool.

**RESULT:** Awaited

**CONCLUSION:** Awaited

**KEYWORDS :** Physiotherapy awareness, Rural, students of Ahmedabad sehgalkanika25@gmail.com pooja@aipt.edu.in

## 12. HYPOPRESSIVE EXERCISE FOR PELVIC FLOOR MUSCLE TRAINING: EVALUATING PRACTICES WITH EVIDENCE

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Traditional abdominal exercises were damaging women's pelvic floor. They can accentuate problems of urinary incontinence, pelvic organ prolapse, and many others so Dr.Marcel Caufriez invented Hypopressive exercises, designed to target the core without inflicting detrimental pressure to the pelvic floor muscles, it's a workout technique meant for activating the involuntary fibers within women's pelvic floor. Hypopressive exercise works on low pressure training and has a vaccum effect by activating transverse abdominis muscle which alternatively effecting pelvic floors. It's a tool for therapist which could be used in various pelvic floor dysfunctions. Addressing to such women issues is need of the hour to make women's life better. This evidence based seminar Evaluate efficacy of newer exercise technique with older exercise technique have been selected from various search engines (2012-2019) like Goggle Scholar, pubmed, Research Gate, Pedro using the key words – Hypopressive exercise, pelvic floor muscle training and pelvic floor dysfunctions.

### 13. COMPARISON OF EMOTIONAL MATURITY AMONG COLLEGIATE BADMINTON AND CRICKET PLAYERS

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**INTRODUCTION :** Emotional maturity is the capacity of an individual to deal with uncertain events, outcomes and environment effectively. Emotional maturity is a great asset with any athlete. Only such athletes succeed who can control their emotions and at the same time make the most of the arousal of energy accompanying the emotions.

**METHOD:** A comparative study was conducted among 100 Collegiate Badminton and Cricket Players. Data was collected by self-administered questionnaire, The questionnaire of Emotional Maturity scale (1977) was constructed and standardized by Yashvir Singh and Mahesh Bhargava and used to collect player responses on sub scale of emotional maturity.

**RESULT:** The mean scores of the level of Emotional Maturity among cricket and Badminton players are 86.00 and 88.96, respectively. Table reveals that the obtain p-value 0.184 which is no significant.

**CONCLUSION :** Emotional Maturity did not significantly differ among Badminton and Cricket Players. The majority of the players are in both the group Moderately stable.

**KEYWORDS :** Emotional maturity, Badminton and Cricket Players, Emotional Maturity scale, self-administered questionnaire

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### 14. PREVALENCE, TYPE, SEVERITY AND IMPACT ON QUALITY OF LIFE AMONG HEALTHY FEMALES WITH URINARY INCONTINENCE OF AHMEDABAD

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**BACKGROUND :** Urinary Incontinence is a condition in which there is involuntary loss of urine which becomes social or hygienic problem, and it can severely compromise physical, psychological, and even affect social and economic well-being of individuals and their families. This problem needs to be study as there is lack of precise data due to lack of awareness about urinary incontinence in healthy females.

**OBJECTIVE :** Aim of the study is to find prevalence, type, severity and impact on quality of life among healthy females with urinary incontinence.

**METHODOLOGY :** This is a cross sectional study where female individuals are included from 18-80 years of age. All data are collected using google form consisting of sociodemographic details, QUID questionnaire for diagnosing type of incontinence which are classified as stress, urge and mixed incontinence and severity and I-QOL questionnaire for quality of life.

**RESULT:** Awaited

**CONCLUSION**: Awaited

**KEYWORDS :** Urinary incontinence, QUID Questionnaire, Female

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### 15. PREVELANCE OF COGNITION AND FALL RISK AMONG DIABETIC AND NON DIABETIC GERIATRIC POPULATION. SALONI DIJESHBHAI GANDHI, DR.VAISHALI SUTHAR, (MPT-NEUROSCIENCES), AHEMDABAD, GUJARAT.

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### **BACKGROUND:**

Aging often exhibit both cognitive impairment and gait abnormality which increases the overall risk of falls.

Diabetes-related subtle declines in sensory functions (somatosensory, visual and vestibular), metabolic muscle function and executive functions may also contribute to increased fall risk in older adults with type 2 diabetes also leads to cognition impairment.

### **NEED OF THE STUDY:**

Need of these study was to find out the prevelance of cognition and fall risk among diabetic and non-diabetic geriatric population.

### **METHOD:**

In these observational study 60 individuals of age 60 or above were selected out of which 30 was of type 2 diabetes and 30 was without diabetes. Montreal-cognitive-assessment-scale (MOCA) was used to assess cognitive function for mild dementia Tinneti fall efficacy scale (FES) was used to assess fall risk.

**RESULT:** 

Result of this observational study showed geriatric with diabetes are more prone to have cognition impairments (38.33%) compared to non diabetic geriatric (31.67%). Where else prevelance of fall risk in diabetic geriatrics were (25%), while that of non-diabetic geriatrics were (20%).

### **CONCLUSION:**

Older adults have risk of fall and mild dementia due to process of aging which leads to muscular imbalance and results into fall, Complication of type 2 diabetes may accelerate normal rate of aging in multiple body systems. Cognition decline in diabetic patient was more prevalent than that of non-diabetic geriatrics, sensorimotor

deficit in diabetic individual results into fall and motoric cognitive risk syndrome compared to those without diabetes.

#### 16. EFFECT OF 3 WEEKS OF CORE STABILITY TRAINING TO IMPROVE RUNNING SPEED AND ENDURANCE BETWEEN 2 GOAL POSTS IN FOOTBALL PLAYERS- A RANDOMIZED CONTROLLED TRAIL

Dr. Basavaraj Motimath1 Ms. Ranjith Kumar M2

**Background:** In football players, core stability is essential because it enhances the spine stability, prevents and improves abilities like speed and endurance. The prevalence of knee injuries is high in football so the assessment of core stability is essential. Thus, core strengthening is a crucial aspect of football players which will improves lower limb coordination and physical performance like speed and endurance. There are studies that have shown improvement in core stability after implementing core muscle training in football players. The present study intends to evaluate the effect of 3 weeks of core stability training to improve running speed and endurance in football players between 2 goal posts.

**Methodology:** Thirty two male recreational football players were randomized into either the interventional group or the control group by using plank test. The interventional group underwent 3-week core stability exercise protocol with 3 sessions per week. The control group received a conventional regular exercise routine for the same duration. Speed and Endurance were assessed pre and post training using 60mtrs sprint, YOYO intermittent, 3cone shuttle respectively.

Outcome measure: Plank test, YOYO intermittent test, 3cone shuttle test, 60m sprint test.

Results: The statistical analysis was done by paired "t" test using the SPSS software version to compare YOYO intermittent test, 3 cone shuttle test and 60mts sprint (in secs). There was a significant difference in both intervention and control groups

**Conclusion:** The study concludes that there is improvement in the core stability strength in both intervention and control groups but there is dearth of literature on core strengthening and its effect in football players and further researches should be conducted on the same for long-term follow-up

Keywords: Core stability, football players, yoyo intermittent test, plank test, 3 cone shuttle test, 60mts sprint test

# 17.VARIABILITY OF Q-ANGLE IN QUAD AND INLINE SKATERS – AN OBSERVATIONAL STUDY

**Background:** Skating is a popular sport that has taken a professional significance in recent years, quad rollers and inline skates are the most popular types of roller skates. Skating requires continuous shifting of postural reactions in order to maintain a correct form. Knee joint is the primary weight bearing joint that is more prone to injuries, the Q-angle gives information about the alignment of knee in frontal plane and any misalignment could lead to issues related the knee creating a disturbance in the player's performance. Determining the variability in the Q-angle in skaters would give the clinicians a better insight at its role in dynamic motion and risk of injury.

Aim: To find the variability of q-angle in quad and inline skaters.

Methodology: This is a cross sectional study that included 84 quad and inline skaters (n=84). The q-angles of these skaters were measured using - the universal goniometer and frontal plane projection angle (FPPA).

**Result:** There were no significant variability seen of Q-angle between the Inline and Quad skaters in terms of goniometric value left side (p = 0.2112) and right side (p = 0.1651) and FPPA values left side (p = 0.1495) and right side (p = 0.823).

Conclusion: The study concluded that there is no variability seen in the q- angles of right and left knee of quad and inline roller skaters.

Keywords: Roller skaters, quad skaters, inline skaters, Q- angle.

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### 18. MYOKINETIC STRETCHING TECHNIQUE AND STATIC STRETCHING TECHNIQUE ON HAMSTRING TIGHTNESS IN SPRINTERS: A RANDOMIZED CONTROLLED TRIAL

Dr. Basavaraj Motimath1, Ms Shivani M. Narvekar2, Dr Dhaval Chivate3

**Background :** Stretching is an important part of an athlete's training as insufficient flexibility can cause different injuries most commonly hamstring injuries and can further affect their performance. Myokinetic stretching technique (MST) is a type of myofascial release which involves active or passive stretching and movement with muscle energy technique to produce release from the taut band. Hence aim is to compare the effect of MST and static stretching technique on Hamstring tightness in sprinters.

**Methodology:** A randomized controlled trial was conducted where 50 sprinters aged between 19-25years (n=50) were included, 25 participants were randomly selected in each group using probability sampling method, pre and post treatment hamstrings tightness was evaluated with active knee extension test(AKET) and sit to reach test, the data was obtained, interpreted and analysed using a SPSS software.

**Results:** Statistical analysis was done using SPSS version 26. Normality of data was checked using Shapiro-Wilk test. Wilcoxon signed rank test was used for within group analysis which showed a significant improvement in AKET (p=0.002) and sit to reach test (p=0.001) and Mann Whitney U test was used for between group analysis which showed no significant improvement in AKET (p=0.006) and sit to reach test (p=0.006) and sit to reach test (p=0.006).

Conclusion: This study concluded that Myokinetic stretching technique and static stretching both are effective in reducing hamstring tightness in sprinters.

Keywords: Myokinetic stretching technique, Hamstring tightness.

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### 19. SCAPULAR POSITION AND THROWING ACCURACY IN CRICKETERS: A CROSS SECTIONAL STUDY

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**Background:** In cricket, shoulder injuries are linked to physiological factors such as decreased shoulder muscle strength, range of motion, and altered scapular position. Throwing events demand rapid development of maximal force, which puts throwers at risk for high-stress tendons, muscles, ligaments, and joint problems. This study intended to correlate scapular position and throwing accuracy in cricketers to understand the functional mechanism resulting in the alteration of scapular position and its effect on throwing performance.

**Methodology:** This observational study consisted of 72 cricketers of age 19.6 + 2.0 from various cricket academies and cricket clubs in Belagavi city. Scapular position was measured by Modified Lateral Scapular Slide Test and throwing accuracy by Functional Throwing Performance Index.

**Result:** The statistical analysis was done using SPSS software version 26. The Pearson correlation coefficient was used to find the relation between scapular position and throwing accuracy. The comparison of difference in scapula positions between dominant and non-dominant side has shown a positive correlation in all the 7 positions with (p<0.001). The throwing accuracy was seen to be positively correlated with scapular position P1 (non-dominant) and negatively correlated (p<0.005) with the difference in dominant and non-dominant scapular positions: P2, P3, P4, P5, P6, and P7.

**Conclusion:** The study concludes that increase in the difference in the dominant and non-dominant scapular position, decreases the throwing accuracy. Thus, it can be inferred that a coordinated and biomechanically accurate scapular position might improve the throwing accuracy in cricketers.

Key words : scapular position, throwing accuracy, cricket players Dr Dhaval Chivate 1 Assistant Professor, Department of Sports Physiotherapy Email: d\_chivate@yahoo.com • Contact number: 8494869771 Pratiksha Kale2 MPT 1st Year Sports Physiotherapy Email: kalepratiksha1499@gmail.com • Contact number: 9594111158 Dr Basavaraj Motimath3 Professor & Head of Department of Sports Physiotherapy Email: bsmotimath@yahoo.co.in • Contact number: 9886100461

