

E-Poster Competition



2nd REHAB & ALLIED SYMPOSIA



*Empowering
Undergraduate
Research*



Vision

To empower undergraduates through exemplary research, nurturing a spirit of inquiry, interdisciplinary collaboration, and the promotion of research—all within the framework of Islamic ethical principles.

Objectives



Recognize and celebrate the outstanding research achievements of our undergraduate students.

Encourage a spirit of inquiry and scholarly pursuit among our undergraduate population.

Foster interdisciplinary collaborations and networking opportunities among students and faculty members.

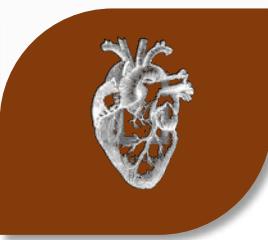
Promote the importance of research and innovation in

Provide a platform for students to present their research projects to faculty members, peers, and the wider academic community.

Themes



Neuro-muscular Physical Therapy



Cardio-Pulmonary Physical Therapy



Sports Physical Therapy



Women Health Physical Therapy



Advancement in Physical Therapy Practice

2nd

Rehab & Allied Symposia E-Poster Competition

“Empowering undergraduate Research”

RESEARCH THEMES

Sports PT
Women Health PT
Cardiopulmonary PT
Neuromusculoskeletal PT
Advancements in PT Practice

17TH JANUARY 2024

International Jury



Prof. Dr Lori Maria Walton
University of Scranton, USA

CHIEF ORGANIZER

Assoc. Prof. Dr Huma Riaz
HOD, DPT (G), FRAHS



SCIENTIFIC COMMITTEE CHAIRS



Dr Francesco Vincenzo Ferraro
University of Derby, UK



Prof. Dr Asghar Khan
Dean FRAHS, RIU, ISB
Chair 1st Scientific session



Hina Tariq
University of Bournemouth, UK



Prof. Dr Arshad Nawaz Malik
Principal, FRAHS, RIU, ISB
Chair 2nd Scientific session



Prof. Dr Qamar Mehmood
Chair 3rd Scientific session

SCIENTIFIC COMMITTEE CHAIRS



Prof. Dr. Asghar Khan

Dean FRAHS

Dr. Asghar, has 30 years of professional experience, certified (CMPT) by North American Institute of Orthopedic Manual Therapy (NAIOM) USA. He was nominated as convener of the HEC National Curriculum Revision Committee (NCRC) in 2016. He is one of the most skilled manual therapists in Pakistan, boasting over three decades of expertise in Manual Therapy and Musculoskeletal Rehabilitation.

Prof. Dr. Arshad Nawaz Malik

Principal FRAHS

Dr. Arshad is a nationally well-known rehabilitation professional with 15 years of academic and clinical experience. He is specialized in Neuro-rehab and certified from Seoul National University South Korea. His major area of research is Stroke rehab, balance dysfunction in elderly population; along with 100 research papers in his credit published in national and international recognized research journals.



Prof. Dr. Qamar Mehmood

Professor FRAHS

Dr. Qamar is a faculty of Rehab & Allied Health Sciences at RIU, Islamabad. He is a certified Bobath Instructor, possesses 32 years of expertise in physical therapy, focusing on pediatric and neurological rehabilitation. He is committed to advancing physical therapy through research and education, stands as the sole member of the Asian Bobath Pediatric Instructors Association among SAARC nations.

INTERNATIONAL JURY

Prof. Dr. Lori Maria Walton

Dr. L Maria Walton, PhD, DPT, MSc.PT, MPH(s), is a Tenured Professor at the University of Scranton with 20+ years of expertise in neurologic and women's health physiotherapy. Her research focuses on the impact of trauma on cognitive and physical health outcomes, emphasizing vulnerable populations globally. Dr. Walton has authored over fifty peer-reviewed articles, presented internationally, and actively collaborates with institutions in South Asia, Europe, North America, and MENA Countries.



Dr. Francesco V Ferraro

Dr. Francesco V Ferraro, a Lecturer in Sports Therapy and Rehabilitation at the University of Derby since 2021, brings over 18 years of experience in sports and exercise disciplines. With a background as a Clinical Trial Manager for Nuffield Health and the Orthopedic Research Institute (UK), he focuses on applying rigorous scientific methods to address physiological and clinical challenges. Currently, his projects involve inspiratory physiology, artificial intelligence, and health.

Dr. Hina Tariq

Dr. Hina Tariq has an experience of over 13 years in physiotherapy and clinical research. Her commitment to the field has only deepened as she is currently on a journey to complete a clinical academic doctorate (PhD) in the UK. With a rich background in both clinical practice and research, she embodies the fusion of experience and scholarly dedication, shaping the future of physiotherapy.



CHIEF ORGANIZER



Dr. Huma Riaz

Associate Professor/ HOD DPT

Dear Students, Faculty Members, and Distinguished Guests,

It is with great pleasure and excitement that I welcome you to the 2nd Rehab and Allied Undergraduate Research Symposia, a testament to your intellectual passion and commitment to excellence within our academic community. The highlight of 2nd Symposia is the E-posters presentations developed by DPT students of Riphah Gulberg Green Campus, being judged by our esteemed International Collaborators from renowned universities along with distinguished leadership of the Faculty of Rehab and Allied Health Sciences, ISB. Our overarching goal for this symposium is to empower undergraduate research by recognizing and celebrating the outstanding achievements of our students. We aim to cultivate a spirit of inquiry and scholarly pursuit among our undergraduate students, fostering an environment where curiosity thrives and knowledge flourishes.

This symposium provides a unique platform for our students to present their research projects, allowing them to showcase their dedication and innovative ideas to faculty members, peers, and the wider academic community. At the heart of our mission is the promotion of the importance of research and innovation in undergraduate education. We firmly believe that encouraging research at the undergraduate level not only enhances the learning experience but also equips our students with the critical skills necessary for success in their future endeavors.

As a Chief Organizer, I extend my sincere gratitude to all participants, DPT students, International and National Jury members, faculty members, and guests for your invaluable contributions to this symposium. I encourage you to actively participate, engage in thoughtful discussions, and receive the networking opportunities that this symposium provides.

Wishing you a stimulating and enriching experience at the 2nd Rehab and Allied Research Symposia.

ORGANIZING COMMITTEE



Dr. Suman Sheraz

Program Facilitator



Dr. Kinza Anwar

In-Charge Scientific Committee



Dr. Abrish Habib Abbasi

Stage Secretary



Dr. Mahat Zafar

In-Charge Students' Management



Dr. Sara Aabroo

In-Charge Media and Refreshment



Dr. Qurat Ul Ain Khan

E-Poster Book Designer

2nd Rehab & Allied Symposia
E- Poster Competition 17th JAN, 2024
Riphah International University, Gulberg Greens Campus

| Program Layout | | |
|---------------------------------|--|------------------|
| Session Time | Title | Moderator |
| OPENING SESSION | | |
| 10:00 AM - 10:05 AM | Tilawat (Recitation) | Dr. Abrish Habib |
| 10:05 AM - 10:10 AM | National Anthem | |
| 10:15 AM- 10:25 AM | Welcome Note by Principal FRAHS | |
| 10:25 AM - 10:35 AM | Program briefing by Chief Organizer | |
| 10:35 AM - 10:45 AM | Address by Worthy guest | |
| 10:45 AM - 11:00 AM | Address by Worthy Vice Chancellor | |
| SCIENTIFIC SESSION | | |
| (Parallel) -E-Poster | Session Chair | Moderator |
| Session I 11:00 – 11:40 AM | Prof. Dr. Asghar Khan (Auditorium Hall) | Dr. Abrish Habib |
| Session II 11:00 – 11:40 AM | Prof. Dr. Arshad Nawaz Malik (Lecture Hall B 304) | Dr. Suman Sheraz |
| Session III 11:00 – 11:40 AM | Prof. Dr. Qamar Mehmood (Lecture Hall B 305) | Dr. Kinza Anwar |
| 11:45-11:50 AM | Comments by Prof. Dr. Lori Session I | Dr. Abrish Habib |
| 11:50-12:00 PM | Session I Concluding Remarks by Worthy Dean | |
| 12:00-12:10 PM | Comments by Dr. Ferraro Session II | |
| 12:10-12:20 AM | Session II Concluding Remarks by Prof. Dr. Arshad Nawaz Malik | |
| 12:20-12:30PM | Comments by Dr. Hina Tariq Session III | |
| 12:30-12:40 PM | Session III Concluding Remarks by Prof. Dr. Qamar Mehmood | |
| CLOSING SESSION | | |
| 12:40 PM – 1:15 PM | Dean's address and winner announcement | Dr. Abrish Habib |
| | Certificates Distribution | |
| 1:15 PM | Refreshment and Photographs | |

Session I: Women Health & Advancement in PT Practice

| | |
|-------------|---|
| S.no | Chair by: Prof. Dr. Asghar Khan |
| | Jury Member: Prof. Dr. Lori Maria Walton |
| 1. | Relationship between kinesiophobia, mobility and fear of fall in women with and without fibromyalgia |
| 2. | Biopsychosocial factors affecting sleep quality in young females. |
| 3. | Association of Cyclic Mastalgia With Anxiety and Depression in Young Females |
| 4. | Frequency and persistence of pregnancy related knee and ankle pain |
| 5. | Frequency of headache, neck pain, forward head posture and its associated factors in hijab wearing females of twin city |
| 6. | Frequency of poor eating habits and its association with MSK discomfort and physical activity in female students. |
| 7. | Association of Dietary Patterns and Anxiety with Different Classes of BMI In Students Having Sedentary Lifestyle |
| 8. | Association of Imposter Phenomenon and Emotional Intelligence among Physical Therapists. |
| 9. | Knowledge and perception of artificial intelligence among physiotherapists in Pakistan: A cross- sectional study. |
| 10. | Physical Fitness and Its Correlation with Hand Grip Strength in Patients with Diabetes. |

Relationship Between Kinesiophobia, Mobility And Fear Of Fall in Women With And Without Fibromyalgia



Muniba Jabbar, Sana Asif, Rubab Shah, Fatima Miraj, Ayesha Siddique.

DPT 10th semester

Riphah International University

INTRODUCTION

- Fibromyalgia is a chronic pain syndrome with widespread muscle pain, fatigue, and tenderness, often associated with sleep and mood disturbances.
- Kinesiophobia is the irrational fear or avoidance of movement and physical activity due to perceived risk of injury or pain.(4)
- Fear of fall is anxiety about potential falls, limiting engagement in activities that involve balance and movement.
- Higher levels of Kinesiophobia, fear of fall and impaired mobility is linked with Fibromyalgia.(1)

METHODOLOGY

- Comparative cross-sectional study conducted in twin cities
- NonProbability convenient sampling technique



Inclusion Criteria

- 30-60 years old females
- Able to communicate with staff
- Had no limitations for physical activity

Exclusion criteria

- Pregnant females
- females with neurological, cardiovascular, psychiatric, vestibular disorders

DATA COLLECTION PROCEDURE



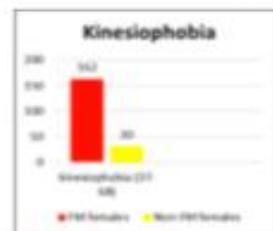
OBJECTIVE

To determine the relationship between Kinesiophobia, mobility, fear of fall in women with and without fibromyalgia.



RESULTS

Differences between FM and Non-FM group is shown in graphs. Also, significant correlation between FES, TSK, TUG and NPRS was examined in both groups, signifying that increase or decrease in one variable will lead to increase or decrease in other variables too. In despite of this, relation with BMI was only significant in Non-FM group.



DISCUSSION & CONCLUSION

- Current study focused on examining the correlation between Kinesiophobia, mobility and fear of falling in females who experience FM and those who do not.
- This study evaluated that FM females endure greater levels of Kinesiophobia, mobility and fear of fall in comparison to Non-FM females.
- Leon-Llamas et al conducted a study that support our study to identify the correlation between kinesiophobia, mobility and fear of fall in females with and without fibromyalgia. (1)
- Alvaro-Murillo et al also reported that fear of fall was correlated with performance in women with fibromyalgia. (2)
- Carval F. Pinheiro et al stated in their study that Kinesiophobia is associated with increased fear of falling.(3)

ACKNOWLEDGEMENT

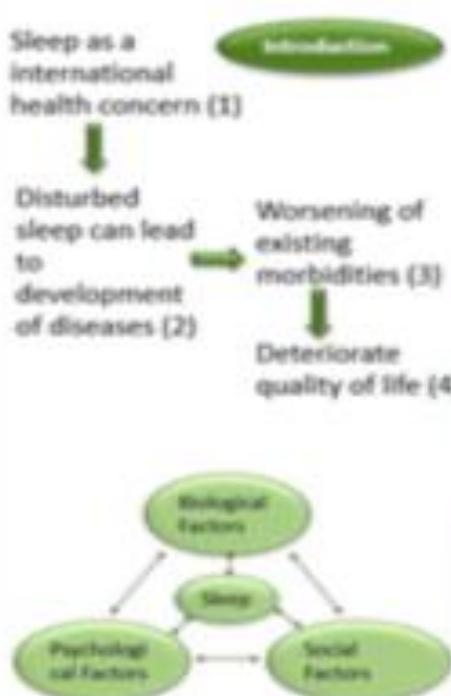
With heartfelt gratitude, We acknowledge the blessings of Allah, the Most Merciful, and the guidance of His Messenger, Prophet Muhammad (peace be upon him). We extend our sincere appreciation to our supervisor Dr. Ayesha Afridi, whose support and mentorship have been invaluable in shaping this thesis and our academic journey.

REFERENCES

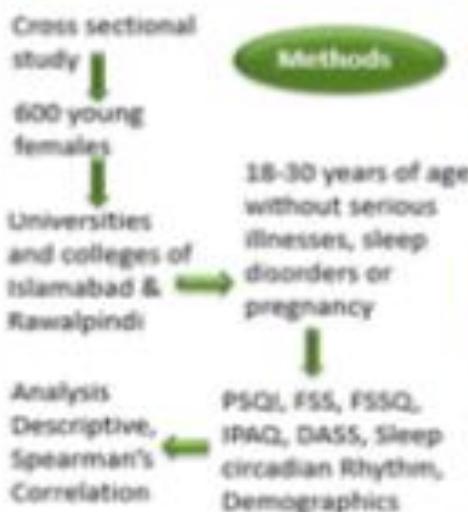
1. Leon-Llamas JL, Murillo-García A, Vilafaina S, Domínguez-Muñoz FJ, Morenés J, Gutiérrez N. Relationship between Kinesiophobia and Mobility, Impact of the Disease, and Fear of Falling in Women with and without Fibromyalgia: A Cross-Sectional Study. 2022;19(14):8257.
2. <https://onlinelibrary.wiley.com/doi/10.1002/pain.13275>
3. <https://www.tandfonline.com/doi/abs/10.1080/09593985.2021.1996496>
4. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0254262>

Bio-psychosocial Factors Affecting Sleep Quality in Young Females

Haneen Hayat (3550), Mahnoor Fatima (3799), Iqra Bibi (3353) ,Hooria Viqas (3223),
Dr. Kiran Khushnood



Objective: To determine the bio-psychosocial factors affecting sleep quality in young females



Results:

Mean Age: 22.14 \pm 3.1 years
Mean Sleep index 13.7 \pm 2.5

Table 3 Sleep characteristics

| Sleep Quality | Score (average quality) |
|---------------------|---|
| Sleep Duration | 62% (>7 hours) 20% (6-7 hours) 18% (<6 hours) |
| Sleep Latency | 50% (>60 minutes) 45% (16-60 min later) |
| Sleep Efficiency | 62% (poor) 34% (good) |
| Sleep Disturbance | 62% (>3 /week) 35% (1-2/week) |
| Daytime Dysfunction | 64% (3-6 /week) |
| Sleep Medications | 32% (>1/week) |

| Marker | Correlation R ² | P-value |
|------------------------------------|----------------------------|---------|
| Unadjusted Δ gut microbiome | 0.00 | 0.11 |
| Unadjusted Δ gut microbiome | 0.00 | 0.001 |
| Microbiome Δ diversity | 0.07 | 0.008 |
| Microbiome Δ beta | 0.05 | 0.009 |
| Physical activity | 0.03 | 0.0001 |
| Exercise | 0.04 | 0.0001 |

2013-2014 年度第二学期

| Option | Confidence (%) | P-value |
|----------------|----------------|---------|
| Smartphone use | 0.00 | 0.00 |
| Cellphone mode | 0.00 | 0.00 |
| Smoking | 0.00 | 0.000 |
| None | 0.01 | 0.000 |

© 2010 Pearson Education, Inc. All Rights Reserved.

| Marker | CopyNumber (0) | P-value |
|------------------|----------------|---------|
| Serial marker | 0.01 | 0.001 |
| Unadjusted | 0.00 | 0.00 |
| Model marker | 0.00 | 0.000 |
| Model marker | -0.001 | 0.000 |
| Model Unadjusted | 0.00 | 0.00 |
| Model | 0.00 | 0.00 |

Conclusion

Young females have average quality sleep, whereas the sleep quality has weak but significant correlations with physical activity, fatigue, depression, anxiety, stress, work status and social support.

References



ASSOCIATION OF CYCLIC MASTALGIA WITH ANXIETY AND DEPRESSION IN YOUNG FEMALES

STUDENT NAME: AROOJ FATIMA (3427), ANUM HAMZA (3600), AYEZA FAROOQ (3770),
USWAH AHMED (3755)

RESEARCH SUPERVISOR: DR. MARIA KHALID

SEMESTER 10TH A



INTRODUCTION

Mastalgia, or breast pain, affects young women during their reproductive years, impacting daily activities and lowering health-related quality of life.^[1]

Two types of mastalgia are cyclic and non-cyclic. Cyclic mastalgia is associated with the menstrual cycle in women, it is also related to hormonal changes that happen during menstrual cycles.

This study aims to address the limited research, particularly on this topic in individuals from various financial and educational backgrounds as well as the association between anxiety, depression, and physical activity in females suffering from cyclic mastalgia.

OBJECTIVES

- To find out the association of cyclic mastalgia with anxiety and depression
- To find out the association between physical activity and mastalgia
- To find out the frequency of cyclic mastalgia
- To find out the association between level of education and cyclic mastalgia in females

PARTICIPANTS

The sample size was 377 calculated through Rao Soft with a confidence interval of 95%. A convenient sampling technique was used.

Inclusion Criteria

- Young females
- Age between 16-35 years.
- Cyclic mastalgia (past 2 months history taking)

Exclusion Criteria

- Malignancy/tumors of the breast
- Inflammatory disease of the chest
- Pregnancy
- Breastfeeding mothers
- Oral contraceptive pills/ hormonal therapy
- Non-breast pain such as Tietze disease, peptic ulcer, or ischaemic heart disease



METHODOLOGY

The study design used was a cross-sectional study.

Tools that were used are as follows:

- Generalized Anxiety Disorder (GAD-7)
- Patient Health Questionnaire (PHQ-9)
- Saltin-Grimby Physical Activity Level Scale (SGPALS)

RESULTS

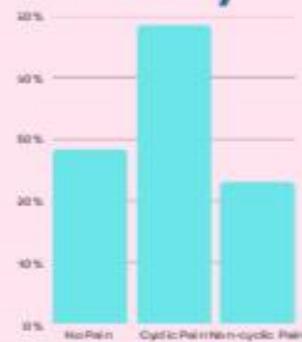
A significant association between cyclic mastalgia and anxiety (p-value of 0.018), as well as depression (p-value of 0.000), was observed.

No significant association was observed between cyclic mastalgia and physical activity, as indicated by a p-value of 0.597.

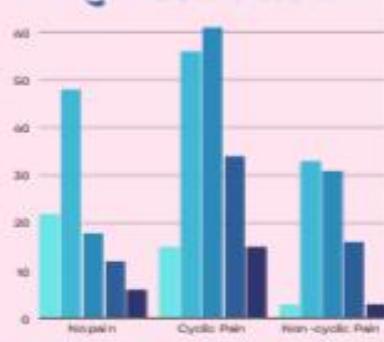
The frequency of cyclic mastalgia was 48.5%.

University-graduated females showed a significant association with cyclic mastalgia.

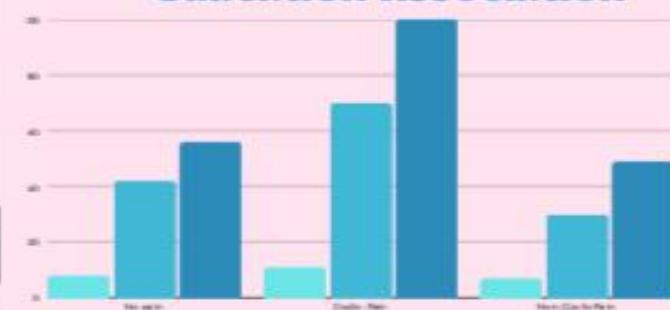
History



PHQ Association



Education Association



DISCUSSION & CONCLUSION

- A study by Mehmet Kagan Katar et al in 2021 concluded a significant association between anxiety and depression with mastalgia in young females. The present study shows the same effect in women with cyclic mastalgia.
- A study by Mojgan Mirghafourvand et al in 2020 concluded a significant association between mastalgia and the level of physical activity. In the present study, no association was observed between cyclic mastalgia and physical activity.
- A study by Deniz KOÇOĞLU et al concluded that females with higher education suffered from mastalgia more frequently. Present study also shows similar association. In this study significant association was observed between cyclic mastalgia, anxiety, and depression, whereas an association between physical activity and cyclic mastalgia was not observed. The frequency of mastalgia in young women in this demographic was not found to be highly significant.

REFERENCE

- Hanait, B.H., Effects of Mastalgia in Young Women on Quality of Life, Depression, and Anxiety Levels, 2016.
- Katar, M.K., Relationship Between Mastalgia And Anxiety/Depression: An Observational Study, 2021.
- Mirghafourvand, M., Relationship Between Physical Activity and Cyclic Mastalgia in Iranian Women, 2020.
- KOÇOĞLU, D., Mastalgia and associated factors: a cross-sectional study, 2017.

ACKNOWLEDGMENT

Special thanks to Dr Maria Khalid for guidance throughout this research project. The Ethical Committee of the Department of Rehabilitation and Allied Health Sciences of Riphah International University approved this study. All participants gave written informed consent before data collection began.

Frequency and Persistence of Pregnancy Related Knee and Ankle Pain

Nimra Ijaz, Ifrah Ishtiaq, Fatima Zahra, Alisha Amjad
Supervisor: Dr Summra Andleeb
Riphah International University Islamabad

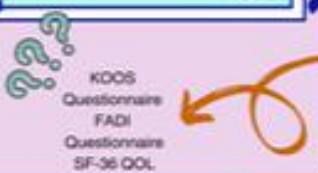


Introduction

Knee and ankle pain can be a result of an injury or a medical condition which can range from a simple sprain to a ligament tear or arthritis and gout. Musculoskeletal pain can be a common complaint during pregnancy. Females often encounter knee and ankle pain at childbearing age. Additionally, hormonal changes, increased weight and changes in the body's center of gravity during pregnancy can affect ligaments and joints, leading to knee and ankle discomfort.

Objective

- To determine frequency of antenatal knee and ankle pain
- To determine persistence of post-partum knee and ankle pain
- To determine effect on quality of life due to pre and post-partum knee and ankle pain



Methodology

- Study design: longitudinal study
- Study setting: hospitals of Riphah and Islamabad
- Study duration: 1 year
- Sample size: of this study was 384 pregnant females

Selection criteria

Inclusion Criteria

- Age (18-40 years)
- Patients in 30th-40th gestational week

Exclusion criteria

- Patients having any knee and ankle injury and orthopedic deformity
- Patients with diagnosed degenerative disease i.e. osteoporosis and osteoarthritis



Figure 1 Frequency of demographics

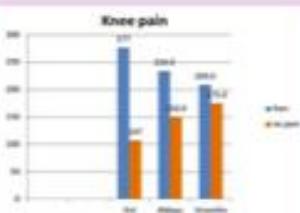


Figure 2 frequency of knee pain

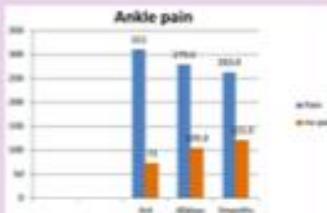


Figure 3 frequency of ankle pain

Result

The mean age of participants was 28.57±3.57

Out of total 384 participants, the majority of participant tested positive for knee and ankle pain, 72.1% and 81.0% during third trimester of pregnancy.

During follow up of 40days postpartum it was observed that the frequency of pain decreased to 68.9% for knee pain and 72.7% for ankle pain.

After 3months postpartum the frequencies were 54.4% for knee pain and 68.5% for ankle pain.

There is a significant positive correlation of knee pain at all times with MCS (Mental component summary) of SF-36 while the score of PCS (Physical component summary) was not significant where negative correlation was observed with knee pain.

A significant positive correlation existed between ankle pain and MCS at all stages. The association between baseline ankle pain and physical component was insignificant but had a significant correlation at 40days and 3month postpartum.

Discussion & Conclusion

Study conducted Narjis PS et al concluded that prevalence of knee pain in third trimester was 73.7% and 26.3% had no pain while our study observed that 72.1% females had complaint of knee pain during third trimester while 27.9% were pain free. Another research in 2022 found that 54.3% females suffered from postpartum knee pain. In our study 60.9% females had knee pain at 40 days postpartum which decreased to 54.4% at 3months postpartum.

Kesikburun S et al reached conclusion that 19.6% females complained of ankle pain while our results show 81% complain of ankle pain during third trimester which significantly decreased during postpartum.

During the course of pregnancy, women encounter different MSK problems. This research concluded that the frequency of knee and ankle pain is high during third trimester of pregnancy though it decreases during postpartum period. The knee and ankle pain maintain a significant positive correlation with the mental components of quality of life at all three intervals. The physical component shows a nonsignificant correlation with knee pain during all three readings but has significant correlation with ankle pain only during postpartum period.

Figure 4 Frequency of Knee and ankle pain at different intervals in pregnant women

| | Baseline | Every day | 3 months |
|------------|----------------|-----------|----------|
| Knee Pain | severe 2.6% | 1.6% | 0.2% |
| Pain | moderate 12.9% | 1.6% | 1.82% |
| Ankle Pain | mild 84.5% | 96.8% | 97.98% |
| | severe 2.6% | 0% | 0% |
| | moderate 8% | 7.9% | 3.4% |
| | mild 89.4% | 92.1% | 96.6 |



References

1. Narjis SF, Jafri PT. PREVALENCE OF KNEE PAIN IN WOMEN DURING THIRD TRIMESTER OF PREGNANCY. 2022.
2. Kesikburun S, Gürerköprüçü Ü, Fidan U, Demir Y, Ergün A, Tan AKJ Team. Musculoskeletal pain and symptoms in pregnancy: a descriptive study. 2018;10(12):229-34.
3. Rasheed S, Sameer SJ, TH JoP, Sciences R. Prevalence of knee pain in post-partum females in Pakistan: A cross-sectional survey. 2022;2(1):110-5.

Acknowledgement

Firstly, let us express boundless gratitude to Allah for His countless blessings and a special thanks to Dr. Summra Andleeb for helping and guiding us throughout this research project. We would like to express our appreciation to all those who have contributed to this project.

Frequency Of Headache, Neck-Pain, Forward Head Posture And Its Associated Factors In Hijab Wearing Females In Twin Cities

Zainab Ali 3208 | Amna Jameel 3257 | Sidra Muzzaffar 3360 | Ayesha Noor 3584



Introduction

Wearing hijab is of significant for Muslims but in present society females modernize hijab with by wearing different styles of hijab and modernize it which can lead to various musculoskeletal problems i.e., Neck Pain, Headache and Forward Head Posture.

Objective

To determine the frequency of headache, neck-pain, forward head posture and its associated factors in hijab wearing females.

Methodology

Sampling Technique

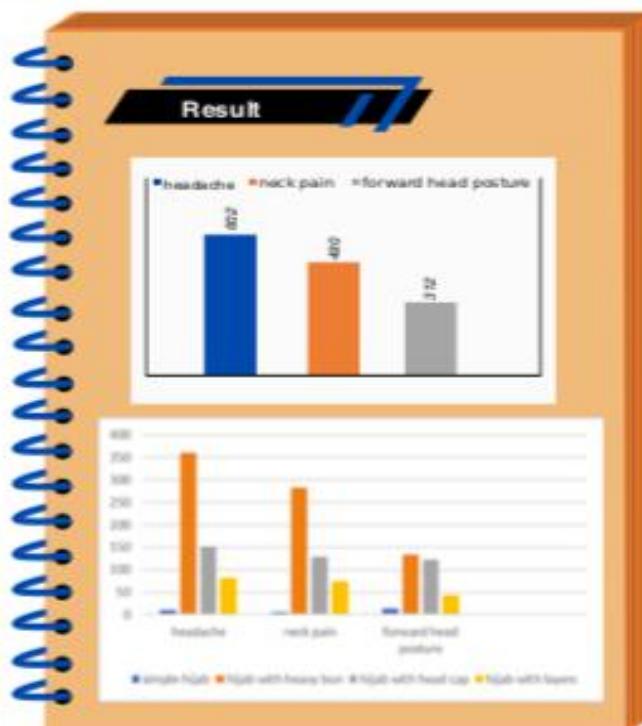
Non-probability convenience sampling technique.

Inclusion Criteria

Females wearing hijab for > 6 hours.
Age 17-40 years.

Inclusion Criteria

Migraine
Arthritis pain
Trigger points of upper trapezius



Discussion

- A study was conducted in 2017 on effect of modern hijab on neck-pain concluded that accessorizing hijab can lead to acute neck-pain.
- Another study conducted by Zainab Abbas in 2022 that showed that 52.1% females who used modern hijab, cervical headache was reported.
- In 2023 S-tyagi conducted a study about how different hairstyles effect forward head posture, cervical mobility and headache. The study conducted that there was slight forward head posture in ponytail and hijab group.

Conclusion

Our study concluded that there is significant relationship between type of hijab, headache, neck pain and forward head posture. Also wearing hijab for longer duration can also lead to musculoskeletal problems.

Acknowledgement

At the very outset we owe all of my heart-felt gratitude to the real Blessers of the universe, Allah Almighty the most Merciful and Benign and also to His Holy Prophet "MUHAMMAD" (peace and blessings of Allah be upon him) the real source of knowledge and torch of guidance for the entire world forever.

Reference

^{**} Kiyani SK, Batool F, Nawaz S, Hussain MA, Yaseen A. Frequency of neck pain in modern hijab wearing females in twin cities. Rawal Medical Journal. 2020^{**}

^{**} Abbas Z, Murtaza F, Sohail M, Ashraf HS, Abbas H, Ahmad B. Effects of Ponytail versus Modern Hijab Wear on Cervicogenic Headache and Postural Deviation. Journal Riphah College of Rehabilitation Sciences. 2022^{**}

^{**} Tyagi S, Saxena A. Prevalence of Ponytail, Bun, Headband and Hijab on Headache, Cervical Mobility and Forward Head Posture. International journal of convergence in healthcare. 2023^{**}



Frequency of poor eating habits and its association with musculoskeletal discomfort and physical activity in female students



Authors

Amna Farooq 3684
Maryam Aftab 3301
Zahra Saher 3703
Hina Irshad 3761

Supervisor

Dr. Sara Aabroo

Affiliations

Riphah International University

Subject

E-Poster

INTRODUCTION

Eating habits have a big impact on people's everyday lives and overall health; this complex relationship is influenced by a lot of elements, such as age, culture, social and economic standing, and mental health. This link between MSK and poor eating habits goes beyond personal preferences and has a big impact on work, education, and general health.

OBJECTIVES

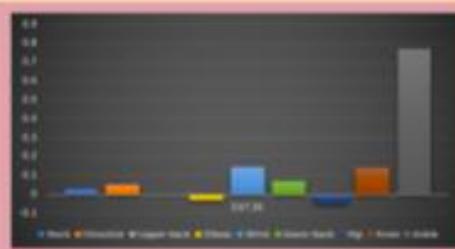
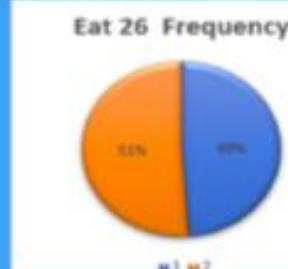
- To determine frequency of poor eating habits.
- Association of poor eating habits with musculoskeletal discomfort.
- Association of poor eating habits with physical activity

METHODOLOGY

Cross sectional study Design
Sample size of 500 participants
Inclusion Criteria: Age 18-35 years, Students Under graduation
Exclusion Criteria: History of MSK disorder (knee pain, neck pain, body pain or due to any other reason) Pregnant female: Having osteopenia, osteoporosis, osteoarthritis, recent MSKsurgery, Gastric issues
Cross sectional study Design
Sample size of 500 participants
Inclusion Data is analysed using SPSS Statistics Software

RESULTS

A total of 500 females with a mean age of 36.57 ± 3.57 participated in the study. 23% participants were underweight and 15.8% participants were overweight. Person correlation was used to analyze association between body mapping at each joint. Spearman's correlation was run to determine relationship between EAT 26 and IPAQ. There is a strong positive correlation between them, which was statistically insignificant ($p=0.525$) SPSS software is used for demographical data of participants.



DISCUSSION

- A study was conducted by Irina motoasca et al in 2023 on eating habits and nutritional status of women with musculoskeletal disease. It concluded that 97% of participants were overweight. In our study we have found that 15.8% participants were overweight with poor eating habit.
- In 2023 Jose Luis Mate et al conducted a study on physical activity, eating habit and wellbeing measure in second year students during Covid-19 pandemic concluded that there was a negative correlation with physical activity. Our study shows that there is a strong correlation of poor eating habits with physical activity.

CONCLUSION

This study concluded that 51% of participants are having poor eating habits with weak positive correlation with physical activity. Strong positive correlation with body mapping at ankle joint. Mild correlation at lower back, shoulder, wrist and knee joint.

ACKNOWLEDGEMENTS

At the very outlet we owe all of our heart felt gratitude to Allah Almighty and His Prophet "MUHAMMAD" (Peace Be Upon Him)

REFERENCES

ERMIŞ E, DOĞAN E, ERİLLİ N, SATICI AJSpAD. Üniversite öğrencilerinin beslenme alışkanlıklarının incelenmesi: Ondokuz Mayıs Üniversitesi örneği. 2015;6(1):30-40.

Gómez MMJ. Prediction of work-related musculoskeletal discomfort in the meat processing industry using statistical models..

ASSOCIATION OF DIETRY PATTERNS AND ANXIETY WITH DIFFERENT CLASSES OF BMI IN STUDENTS HAVING SEDENTARY LIFESTYLE.

AUTHOR

RUBAB FATIMA, MARYEM TARIQ, WAJEEHA SHABBIR AND MAHA EJAZ
SUPERVISED BY DR.MADINA ALI
RIPHAH INTERNATIONAL UNIVERSITY

Introduction

Sedentary lifestyle have become more prevalent around the world as a result of fewer chances to exercise. Adoption of TVs and video game. 3.60 % of population of global does barely engage in 30 min of moderate exercise everyday. Sedentary behaviour a low physical activity level, unhealthy dietary pattern and risk factor for major chronic diseases, obesity and cardio metabolic disease. A poor diet related to poor choice in food consumption or the lack of access to healthy foods is the main reason for weight problems and health disorders.

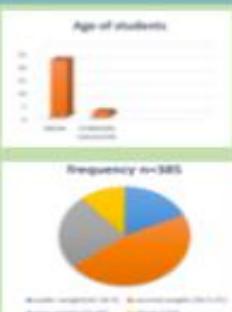


Rationale/Significance

The significance of this study is to overcome the limited findings and inconsistency in comparison of BMI changes with Dietary pattern and anxiety in sedentary lifestyle students. Our research makes an important contribution to measure the trend of weight status in students and as a screening tool to identify potential weight problems affecting mental status in sedentary lifestyle students and to found that BMI changes are linked to mood and anxiety disorders. This means that if you have BMI changes you may be more likely to suffer from health condition like depression and anxiety. High energy diet with high salt intake and irregular meals without any physical activity can impact student health comprising its cognitive capabilities.

• To determine the Association of Dietary patterns and anxiety with different classes of BMI in students having Sedentary lifestyle.

Results



| BMI Category (Students) | BMI categories of students | | | | n |
|-------------------------|----------------------------|-------------|-----------------|-----------|-----|
| | Underweight (15) | Normal (13) | Overweight (12) | Obese (4) | |
| Underweight | 31 | 41 | 1 | 1 | 43 |
| Normal | 30 | 40 | 8 | 10 | 88 |
| Overweight | 31 | 33 | 11 | 10 | 74 |
| Obese | 3 | 14 | 5 | 2 | 24 |
| Total | 95 | 98 | 27 | 13 | 385 |



This study shows no association between Anxiety and BMI ($P=0.05$). While previous study by Gómez and his colleagues conducted that females who were either overweight or obese were significantly have all the symptoms of anxiety.

The association between protein and BMI is significant. Other study by Zerine Wirth and colleagues found that higher protein intake was associated with higher BMI.

This Study has significant association between dairy products and BMI ($P=0.04$). Regarding prospective studies by Dr. Nancy Batio showed, total milk consumption was positively associated with overweight prevalence.

Conclusion

1. This study indicated a remarkable association with dietary pattern (protein, fruits, vegetables, dairy products, omega) and BMI while the study showed no significant association between anxiety and BMI in sedentary female students.

Strong Association

- Protein
- Vegetables
- Dairy products
- Cereals
- Fruits

No Association

- Between Anxiety and BMI

1. Pav, J.H., Moon, J.H., Kim, H.J., Kang, M.H., Oh, H.Y.U. (2019). Sedentary lifestyle: overview of updated evidence of potential health risks. 2020;4: 163-185.
2. Bawali, W.M., Nasr, S.G.S.M.P.S. Lifestyle choices: the Link between Modern Lifestyle and threat to public health. 2021; 3(4): 79-94.
3. Wachira L-JUSB-ACU. Lifestyle trends and towards sedentary behavior among children and youth in Sub-Saharan Africa: a narrative review. 2021.
4. Romero-Sánchez C, Rodríguez-Almagro J, Orive-Zafra MD, Plaza Fernández M, Prado-Laguna MD, Hernández-Martínez A.J. et al. Physical activity and sedentary lifestyle in university students: A systematic review. 2016; 116: 194-202.
5. Castro O, Bermejo J, Vergara J, Bascuñán G, Ballester S.J.U.Pn. Correlates of sedentary behaviour in university students: A systematic review. 2016; 116: 194-202.

References

We would like to give special thanks to our research supervisor Dr. Madina Ali for her dynamic supervision, constant encouragement, sympathetic attitude and inspiring guidance during the research process.

Acknowledgement

KNOWLEDGE AND PERCEPTION OF ARTIFICIAL INTELLIGENCE AMONG PHYSIOTHERAPISTS IN PAKISTAN: A CROSS- SECTIONAL STUDY

Authors: Hina Fatima 3350, Najaf Iqbal 3206, Asma Noreen 3794, Aimen Ur Rehman 3777

Supervisor : Dr. Sumaiyah Obaid

Affiliation: Riphah International University



A. Introduction

To eliminate errors and enhance the efficacy, productivity, precision, and results of clinical treatment, artificial intelligence (AI) is being implemented in the health care systems of advanced nations (1). Artificial intelligence (AI) is being used in the field of rehabilitation at a very quick pace (2). It is necessary to comprehend how physical therapists (PTs) see AI technologies in order to effectively implement them in clinical settings and academics side.



B. Objective

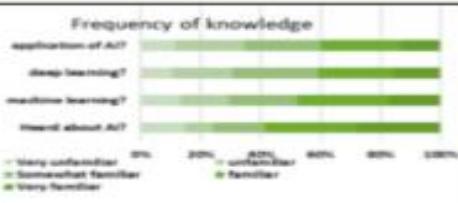
Although previous research has identified the numerous applications of AI in health care and rehabilitation but little has been studied regarding PTs' perspective and understanding that's why the aim of our study is to assess the knowledge and perception of AI among physiotherapist's.

C. Methodology

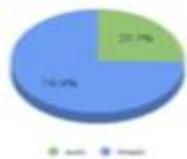
- observational study(cross sectional survey)
- Non-probability purposive sampling technique was used.
- self structured, validated by 2 experts, 5 point Likert scale questionnaire was used.
- Response rate of the questionnaire was 99.2% (4).
- Data was collected opportunely from the physical therapists of Islamabad, Rawalpindi, KPK and Attock working in different hospitals and universities.
- Both male and female physiotherapists having at least 6 months experience in clinical and academics were included in our study.

D. Results

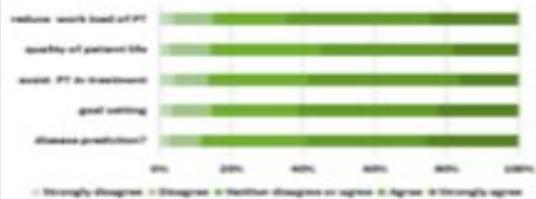
- With regard to respondent gender, 25.1% (94/374) of the participants were males, and 74.9% (280/374) were females.
- Average mean score for the knowledge is neutral (3.2) & perception is positive (3.6) (4).
- Mann-Whitney U test was applied to test the gender based hypothesis in which only 2 questions (1.machine learning and 2.deep learning) out of 23 showed significant difference between male and female. ($p < 0.05$)
- Moderate Pearson's correlation ($r=0.4$) was found between knowledge and perception.
- We calculate the reliability (cron alpha) of questionnaire 0.8



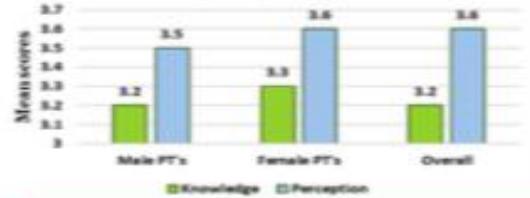
Frequency chart of gender



Frequency of perception



Gender-based mean score of knowledge and perception



E. Discussion and Conclusion

A notable deficiency in understanding of artificial intelligence (AI) and its terminologies, machine learning and deep learning was observed in our research; these findings are equivalent to the work of Simone et al. (2020) who was found out a widespread lack of understanding of AI and its uses. Just few of respondents grasped the distinction between machine learning and deep learning, while the other half were unaware of these concepts (3). In our research it was concluded that physiotherapists have neutral knowledge and positive perception towards artificial intelligence.

F. References

- Abid S, Awan B, Ismail T, Sarwar N, Sarwar G, Tariq M, et al. Artificial intelligence: medical student's attitude in district Peshawar Pakistan. 2019;9(1):19-21.
- Alsobhi M, Khan F, Chevibounnan MF, Basudan R, Shawli L, Neamatallah ZJ, et al. Physical Therapists' Knowledge and Attitudes Regarding Artificial Intelligence Applications in Health Care and Rehabilitation: Cross-sectional Study. 2022;24(10):e39565.
- Castagni S, Khalifa M, Jhai. Perceptions of artificial intelligence among healthcare staff: a qualitative survey study. 2020;5:578983.
- <https://calculator.academy/response-rate-calculator/>
- Sack, H. (2020, August 05). Rensis Likert and the Likert scale method. SciHi Blog.

G. Acknowledgement

My gratitude extends to my colleagues and friends who have offered their assistance and encouragement during this journey.



PHYSICAL FITNESS AND ITS CORRELATION WITH HAND GRIP STRENGTH IN PATIENTS WITH DIABETES IN PAKISTAN



AUTHORS

AYESHA UMER, AYESHA KHAN
ROMANA BUSHRA, RABIA FARAZ MALIK



AFFILIATION

RIPHAH INTERNATIONAL UNIVERSITY



Introduction

Diabetes Mellitus is a global public health concern, affecting over 33 million individuals. Beyond metabolic implications, recent research emphasizes the multifaceted nature of the disease, particularly its impact on physical fitness components and hand grip strength (HGS), which is a key physical fitness indicator.



objective

To determine the physical fitness and hand grip strength (HGS) in Type 2 Diabetes Mellitus (T2DM) patients and analyse their correlation



This study bridges the gap in understanding the HGS and physical fitness relationship in diabetes patients. Focusing on practical hand grip strength it identifies intervention areas for enhanced diabetes management, guiding tailored exercise programs and emphasizing holistic health in diabetes care.



Methodology

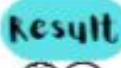
DATA ANALYSIS SPSS 23

DESCRIPTIVE RESULTS

MANN WHITNEY U TEST

PEARSON CORRELATION

LINEAR REGRESSION



Result

Data was collected from total of 319 participants with diabetes consisting of 104 males (32.6%) and 215(67.4%) females. The regression analysis showed that HGS were positively correlated with physical fitness component i.e., shoulder neck mobility (variance 4.1%), sit & reach test (variance-4.7%), jump & reach (variance-6%), one leg stand (variance-9.4%), Dynamic sit-up (variance-9.2%), and 6MWT (variance-9.7%), Modified push up and VO2 max (variance-10%). BMI, figure of eight test and waist circumference has no correlation with HGS.

Table: Demographic Characteristics.

| Demographic | Male | Female | Overall |
|-----------------------|-------------|-------------|-------------|
| Mean | Mean | SD | SD |
| Age (years) | 49.89±8.87 | 48.26±8.87 | 48.49±8.79 |
| Weight (kg) | 79.15±13.87 | 78.99±12.68 | 79.48±12.97 |
| Height (cm) | 166.89±8.45 | 157.53±8.20 | 160.58±8.48 |
| Years of diagnosis of | 5.87±5.75 | 5.45±4.55 | 5.52±4.97 |

Table: Correlation of HGS with Components of Physical Fitness.

| Outcome value | Overall (R value with HGS) | Male (R value with HGS) | Female (R value with HGS) |
|------------------------|----------------------------|-------------------------|---------------------------|
| Shoulder Neck mobility | 0.263** | 0.277** | 0.164* |
| One Leg Stand | 0.307** | 0.321** | 0.210** |
| BMI | 0.083 | 0.141 | 0.074 |
| Waist _{cm} | 0.09 | 0.058 | 0.057 |
| Sit And Reach | 0.217** | 0.29 | 0.266** |
| Figure Of Eight | -0.075 | -0.166 | -0.057 |
| Dynamic Sit-Ups | 0.303** | 0.242** | 0.196** |
| Jump And Reach | 0.244** | 0.299** | 0.163 |
| Modified Pushup | 0.326** | 0.325** | 0.189** |
| VO2 max | 0.317** | 0.309 | 0.073 |

Acknowledgment

Special thanks to the study participants for their contribution to advancing our understanding of diabetes and healthcare.

References

1. Khalid P, Pervaiz A, Aslam P, Majeed A, Sharmin S, et al. A global and regional study to predict diabetes risk. 2017 *Med J Agha Khan* 30(2):109-116. doi:10.1007/s40038-017-0210-1.
2. Bhopal R, WT, Aslam A, Aslam P, Tahir S, Sharmin S, et al. A study of the physical fitness of the Type 2 Diabetic Patients. 1. Generalized vs. The Diabetic and Non-Diabetic. 2012 *Med J Agha Khan* 35(2):113-118.
3. Pan J, Jia W, Lv Y, Lv X, Li X, Liu Y, et al. Physical fitness and its correlation with hand grip strength in the elderly. 2011 *Med J Agha Khan* 34(2):175-179.
4. Khan S, S, and Iqbal S. Relationship between grip strength and hand grip strength in the elderly. 2011 *Med J Agha Khan* 34(2):175-179.
5. Khalid P, Aslam P, Majeed A, Sharmin S, et al. A study of hand grip strength and hand grip strength in the elderly. 2012 *Med J Agha Khan* 35(2):113-118.
6. Khalid P, Aslam P, Majeed A, Sharmin S, et al. A study of hand grip strength and hand grip strength in the elderly. 2012 *Med J Agha Khan* 35(2):113-118.

Session 2: MSK & Occupational Health

| | |
|-------------|--|
| S.no | Chair By: Prof. Dr. Arshad Nawaz Malik |
| | Jury Member: Dr Francesco V Ferraro |
| 1. | Frequency of knee injuries and their association with Q -angle among karatekas in Rawalpindi and Islamabad, Pakistan |
| 2. | Frequency of upper limb dysfunctions and its association with activity of daily living among coal mine workers. |
| 3. | Knowledge, attitudes and practice regarding carpal tunnel syndrome among dental practitioners of twin cities. |
| 4. | Frequency of shoulder impingement in table tennis players vs badminton players. |
| 5. | Frequency Of De Quervian Tenosynovitis Among Athletes and Its Association with Grip Strength and Hand Functional Status. |
| 6. | Frequency of Shoulder Impingement and It's Association with Sleeping Posture in Adults. |
| 7. | Frequency of Neck Pain and its Association with BMI and thoracic hypomobility in University Students. |
| 8. | Ergonomic and Psychosocial Risk Related To Upper Extremity Musculoskeletal Problems In Computer Users. |
| 9. | Level of stress, Anxiety and its association with Cognitive Abilities among University Faculty. |
| 10. | Relationship between professional quality of life with physical activity among healthcare workers. |

Frequency of knee injury and its association with Q-angle among karatekas in Rawalpindi & Islamabad, Pakistan



Authors:

Aiza Hassan Khan, Komal Attaullah Asan, Rimsha Nadeem, Sajma Sajjad Khan, Umber-un-Nisa

Affiliations: Riphah International University, Islamabad, Pakistan.

Introduction

Knee injuries are a frequent challenge for young karatekas, impacting their dynamic, Heels, pivot and overall performance. This research aimed to investigate the frequency of knee injuries in karate players and explore the potential relationship between Quadriceps angle and these injuries, given the strenuous nature of karate movements.

Objective

1. To determine the frequency of knee injuries among karatekas in both cities of Pakistan.
2. To determine the association between knee injuries and Q-angle.
3. To determine the impact of knee injuries on ADLs among karatekas.

Methodology

Study design: Cross-sectional Study

Sampling Technique: Non-probability, convenient sampling

Tools:

1. Personal and sport information questionnaire
2. Questionnaire on knee injury profile
3. Activities of daily living scale of knee outcome survey (KOS)
4. Visual analogic scale (VAS)
5. Centimeter



Discussion

Saeher Hosseini et al (2018) found that the highest incidence of lesions was in the lower extremity (58.4%). They also showed that karate can influence an athlete's posture according to the training and repetition of movement and showed increased Q angles in karatekas. Our study is in accordance with the findings, with 31% participants reporting knee injury that occurred due to karate practice. However, among them the pain severity was severe for 8.9% of athletes which lie in 8-10 score of VAS. Majority of the participants sustained mild-moderate injuries. This could be due to multiple factors such as increased warm-up time and evenly distributed work-out sessions in a week both of which can attribute to lesser incidence of severe injuries.

Results

Total 278 individuals were approached in different karate clubs of Rawalpindi and Islamabad (172 females, 106 males). The mean age is 13.750 ± 3.08 of our sample. Their average weight (kg) is 44.1 ± 12.4 and average height (cm) is 157.8 ± 16.4 . Out of 278 karatekas, 87 reported knee injury in the past. Knee injury Frequency: 31%. Q-angle (F-L) Relation with KOS-ADLS, $SAN: p = 0.08$, VAS relation with KOS-ADLS, $SAN: p = 0.05$, VAS relation with Q-angle (F-L), $p = 0.05$.



Conclusion

The chi-square tests revealed a moderate positive association between Q-angle and ADLS or Sports activity performance among karatekas with knee injuries. Normal Q-angles were associated with better KOS scores, indicating optimal sports activity performance.

Frequency of Visual Analog Scale Scores



Knee Injury Incidence



Acknowledgement

We express our profound gratitude to Dr. Maral Zafar and our fellow researches' invaluable contributions which were instrumental in shaping the depth and rigor of our research. We also acknowledge the karate clubs and their members who generously participated in our study.

Reference

Shamsuzzaman S, Zaidi S, Bhatti AJJURISH. Common injuries and sport injuries in elite karate athletes. 2018;10(1):111-25.



SEHRISH ZAHEER, SUMAYYA ZAFAR, YUSRA SHUAIB, SHAHZADI GULFISHAN
Supervisor: Dr. NADIA AZHAR

INTRODUCTION

Mining, which is physically intense and psychologically demanding work. One of the most dangerous occupations globally, which poses many health problems to workers, is coal mining, reducing people's ability to work and participate in society.



OBJECTIVE

To determine the frequency of shoulder, elbow and wrist dysfunctions and its association with the ADLs among coal mine workers.

ANALYSIS

Out of 302 coal mine workers this study identified 112 positive cases who exhibit symptoms indicating upper respiratory dysfunction. Upon analysis the study shows strong positive correlation, $p=0.025$ between upper respiratory index and keto index. If AQL is negative, that is, no respiratory dysfunction effects the annual period of study activities.

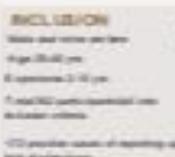


SIGNIFICANCE

This research will contribute in substantially to the already existing literature by filling the gap in studies that particularly target on the frequency of upper limb dysfunctions in coal miners, as it assists in recognizing the risk factors and finding root cause of such dysfunctions. The study will advantage society by recognizing preventive measures that can lessen the occurrence of upper limb dysfunctions in coal miners.

METHODOLOGY

Descriptive cross-sectional study conducted at coal mines in CHAKWAL, PAKISTAN. Data was collected through questionnaire such as upper extremity functional index and Katz Index of independence etc. in June 2023 to July 2023 and analyzed by using SPSS version 25.



DISCUSSION & CONCLUSION

If the upper limb dysfunctions will be increased it significantly increases the chances of affecting their abilities of daily living. In our study there were 382 workers out of which 172 were the positive cases of upper limb dysfunctions same as to another research on musculoskeletal disorders in coal mine workers using the traditional means of coal cutting and transporting, determining the upper and lower arm injury was conducted by Sojod et al in CHAKWAL, PAKISTAN. Upper limb dysfunctions are more prevalent in coal mine workers according to their findings.

REFERENCES

¹Global 1000, Results of the 1000-Participant Prospective International Study of the Clinical Course of Rheumatoid Arthritis. *Arthritis Rheum* 2001;44:2321-30.
²See *Wolfe F, Fries JF, Masi AT, Myslinski W, Felson M, et al. Health in the 1000-Patient Prospective International Study of the Clinical Course of Rheumatoid Arthritis. A 10-Year Follow-up. Arthritis Rheum* 2001;44:2321-30.

ACKNOWLEDGEMENTS

Health field graduate to the medical
Blessing of the universe, ALLAH
BLESSEDNESS.

Knowledge Attitude And Practice regarding Carpal Tunnel Syndrome among Dental Practitioners in Twin Cities

AUTHORS

KHADJA JAVED
ABEER HAFFEZZ
SAMMAN AFTAB

AFFILIATIONS

SUPERVISOR - DR SHUMAILA
YACOUB RIFHAH INTERNATIONAL
UNIVERSITY

INTRODUCTION

The carpal tunnel is a narrow passageway in the wrist that is a continuation from the elbow to the hand. This tunnel is susceptible to compression neuropathy with different signs and symptoms known as carpal tunnel syndromes.

The use of vibrating tools and their repetitive use increases the risk of musculoskeletal injuries in dental practitioners.



RESULTS / FINDINGS

Outcome of this study is that in Twin Cities, Saudi Arabia, knowledge and high attitudes with overall knowledge was also observed that dentists have no knowledge about Carpal Tunnel Syndrome; however, they want to improve their knowledge in future or never.

Pearson's Correlation of Knowledge, Attitude and Practice

| Correlation of Knowledge, Attitude & Practice | R value | P value |
|---|---------|---------|
| Knowledge with Attitude | .280 | .001 |
| Attitude with Practice | .275 | .001 |
| Practice with Knowledge | .207 | .001 |
| Total Score of Knowledge | 0.800 | 2.79 |
| Total Score of Attitude | 0.722 | 4.87 |
| Total Score of Practice | 0.712 | 7.38 |



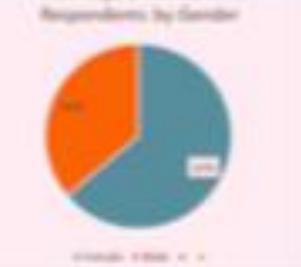
OBJECTIVE

The aim of this study was to investigate the Knowledge, Attitudes and Practice in dental practitioners regarding Carpal Tunnel Syndrome (CTS).

Comparison of Percentage Scores of Knowledge, Attitude & Practice



Percentage Distribution of Respondents by Gender



ANALYSIS

- Data were analyzed by using SPSS version 25.
- Frequencies/Percentages were calculated.
- Quantitative data is measured by Mean & Standard deviation.
- Spearman Correlation & Pearson's Correlation test were used.

Discussion / Conclusion

A study conducted on dentists in 2016 on preventing the occurrence of work-related musculoskeletal disorders concluded that dentists had high knowledge, high attitudes and high practice. Compared to dentists in our study, who had low knowledge, high attitudes and average practice with relation to carpal tunnel syndrome, which shows that both dentists and doctors have high attitudes. To conclude, CTS can affect the quality of life in dentists and control their daily activities, which affects its importance. It is a fair to good knowledge, attitudes and practice regarding carpal tunnel syndrome.

ACKNOWLEDGEMENT
The authors would like to thank Riffah University of Medical Sciences, Dentists, Dentist and students. Dr. Dilemma Haque, for her opinions, suggestions, comments, encouragement, support and inspiring atmosphere during the process of accomplishment of research work and this manuscript.

REFERENCES:

1. GOMBERG E, HEDSTRÖM M, HEDSTRÖM U, HEDSTRÖM L, HEDSTRÖM M. PREVALENCE OF WORK-RELATED DISORDERS AMONG DENTISTS IN SWEDEN. 2000;10(1):1-10.
2. HEDSTRÖM E, HEDSTRÖM M, HEDSTRÖM U, HEDSTRÖM L, HEDSTRÖM M. PREVALENCE OF WORK-RELATED DISORDERS AMONG DENTISTS IN SWEDEN. 2000;10(1):1-10.
3. HEDSTRÖM E, HEDSTRÖM M, HEDSTRÖM U, HEDSTRÖM L, HEDSTRÖM M. PREVALENCE OF WORK-RELATED DISORDERS AMONG DENTISTS IN SWEDEN. 2000;10(1):1-10.
4. HEDSTRÖM E, HEDSTRÖM M, HEDSTRÖM U, HEDSTRÖM L, HEDSTRÖM M. PREVALENCE OF WORK-RELATED DISORDERS AMONG DENTISTS IN SWEDEN. 2000;10(1):1-10.

FREQUENCY OF SHOULDER IMPINGEMENT IN TABLE TENNIS PLAYERS VS BADMINTON PLAYERS

Mahnoor Imtiaz, Vaneeza Qadeer, Zamzama Kakar, Hira Iqbal,
Dr. Sara Aabroo

| Introduction | | MATERIALS AND METHODS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---------------|---|---------|-------------|---------------|------------|-----------|------|------|---------------|------|------|----------------|------|------|------------------|---------------|------------|---------|---------------|-----|-----|--|------|------|------|--|----------|------|------|--|--------|------|-----|--|------------------|-------|------|-------|
| <ul style="list-style-type: none"> Shoulder discomfort that includes pain and unsteadiness, particularly when doing overhead repeated movements of arm, is a symptom of several shoulder illnesses known together as impingement syndrome. These conditions all share the pathologic history of rotator cuff tendinitis, which if left untreated may progress to cuff rupture. | | <p>Study Design: Cross-sectional study Sample Size: Data was 377 calculated by RAN soft Study Duration: 6 months Sampling Technique: Non-Probability Convenience Sampling Technique was used</p> <p>Selection Criteria:</p> <p>Inclusion Criteria: Tennis and badminton players</p> <ul style="list-style-type: none"> > 1-4 hours daily training > Age: 18-30 years > Both genders <p>Exclusion Criteria: Diabetes</p> <ul style="list-style-type: none"> > Hypertensive players > Injured players > Athletes with neurological issues > Athletes with Limb deformity > Athletes with genetic disorders <p>Study Tools:</p> <ul style="list-style-type: none"> > Neer's test > Empty can test > Full can test > Shoulder disability questionnaire | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Objectives | |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> To determine the frequency of shoulder impingement in Table Tennis players versus Badminton players. To determine disability in table tennis players versus badminton players due to shoulder impingement. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Rational | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <ul style="list-style-type: none"> Pain and R/F pathology can be a major setback for participating athletes. There aren't many studies that discuss how common impingement syndrome is among Pakistani athletes. The goal of this study is to cover two major sports that involve shoulder joint and determine whether badminton players are more likely than tennis players to acquire impingement syndrome in order to reduce the risk of Pathology. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Results | | <p>Frequency of impingement in both tennis and table tennis</p> <table border="1"> <thead> <tr> <th>Impingement</th> <th>TABLE TENNIS%</th> <th>BADMINTON%</th> </tr> </thead> <tbody> <tr> <td>Neer test</td> <td>52.4</td> <td>41.2</td> </tr> <tr> <td>Full can test</td> <td>52.9</td> <td>46.4</td> </tr> <tr> <td>Empty can test</td> <td>50.7</td> <td>45.5</td> </tr> </tbody> </table> <p>Independent T test showing difference between disability in both tennis and table tennis</p> <table border="1"> <thead> <tr> <th>Level Disability</th> <th>TABLE TENNIS%</th> <th>BADMINTON%</th> <th>P value</th> </tr> </thead> <tbody> <tr> <td>No Disability</td> <td>4.7</td> <td>2.9</td> <td></td> </tr> <tr> <td>Mild</td> <td>46.4</td> <td>49.2</td> <td></td> </tr> <tr> <td>Moderate</td> <td>36.8</td> <td>31.1</td> <td></td> </tr> <tr> <td>Severe</td> <td>26.1</td> <td>2.9</td> <td></td> </tr> <tr> <td>Total Disability</td> <td>39.89</td> <td>3.46</td> <td>0.001</td> </tr> </tbody> </table> | | Impingement | TABLE TENNIS% | BADMINTON% | Neer test | 52.4 | 41.2 | Full can test | 52.9 | 46.4 | Empty can test | 50.7 | 45.5 | Level Disability | TABLE TENNIS% | BADMINTON% | P value | No Disability | 4.7 | 2.9 | | Mild | 46.4 | 49.2 | | Moderate | 36.8 | 31.1 | | Severe | 26.1 | 2.9 | | Total Disability | 39.89 | 3.46 | 0.001 |
| Impingement | TABLE TENNIS% | BADMINTON% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Neer test | 52.4 | 41.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Full can test | 52.9 | 46.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Empty can test | 50.7 | 45.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Level Disability | TABLE TENNIS% | BADMINTON% | P value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| No Disability | 4.7 | 2.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mild | 46.4 | 49.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Moderate | 36.8 | 31.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Severe | 26.1 | 2.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Disability | 39.89 | 3.46 | 0.001 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conclusion | | <p>The study found that both badminton and table tennis have similar effects on shoulder disability and impingement.</p> <p>Badminton had more impingement but there was no significant difference in disability level based on impingement.</p> <p>The study recommends future research to include participants of different age groups to further explore the effects of these sports, focus on lifestyle changes for better shoulder training and injury prevention.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| References | | <p>1. S. A. Imtiaz, M. Aabroo, T. Ghani, S. Kakar, M. Sharif, and H. Iqbal. Shoulder Impingement in Table Tennis and Badminton. <i>Journal of Clinical Orthopaedics</i>. 2019; 3:161-170.</p> <p>2. S. A. Imtiaz, M. Aabroo, T. Ghani, S. Kakar, M. Sharif, and H. Iqbal. Shoulder Impingement in Table Tennis and Badminton. <i>Journal of Clinical Orthopaedics</i>. 2019; 3:161-170.</p> <p>3. M. Aabroo, H. Iqbal, M. Sharif, and H. Kakar. Evaluation of shoulder girdle in Table Tennis and Badminton. <i>Journal of Clinical Orthopaedics</i>. 2019; 3:161-170.</p> <p>4. H. Iqbal, M. Sharif, H. Kakar, and M. Aabroo. Evaluation of shoulder girdle in Table Tennis and Badminton. <i>Journal of Clinical Orthopaedics</i>. 2019; 3:161-170.</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



Discussions

Study showed prevalence of shoulder impingement in both groups but higher in Badminton players because it measures the anomalies in order to develop reliable values which is a form of using reliable scores.

Long-term repetition of these actions in table tennis would result in overload stress and microtrauma to the shoulder joint's musculoskeletal structures.

Our study also reported effects of regular badminton on pain levels which is not using daily life activities due to impingement because playing at a high level of badminton requires high-intensity, repeated, short duration microtrauma with a wider range of shoulder mobility as well as shoulder strength and muscle endurance.

Players of both groups faced major disabilities but more of badminton players faced severe disability and in table tennis group maximum players had mild disability.



Frequency Of Shoulder Impingement And It's Association With Sleeping Posture In Adults

Sadaf Mir 3390, Nimra Ishtiaq 3282, Alisha Zainab 3429,

Zarmina Derwaish 3612

Supervisor: Dr Nadia Ishtiaq

Degree Programme: DPT



INTRODUCTION

Shoulder impingement is one of the leading causes of musculoskeletal-related shoulder pain. It is mainly caused by vigorous movements especially over-the-head activities or athletic activities or due to degenerative changes. It commonly occurs in people who participate in sports e.g. handball, volleyball, and swimming or engage in activities that require overhead movement e.g. carpenters, painters, and hairdressers



OBJECTIVES

To determine frequency of shoulder impingement

To determine the frequency of shoulder impingement and its association with sleeping posture in adults.



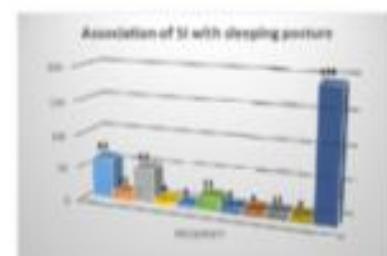
DATA ANALYSIS

The research was conducted at twin cities hospitals from their physical therapy OPD. The data was collected through a self-made questionnaire. Data was analyzed using SPSS version 21



RESULTS

The research was conducted on 683 participants. Questionnaires were collected from physical therapy OPDs of hospitals in twin cities of Rawalpindi and Islamabad. Both males and females are included in this study with age ranges from 25 to 50 years. Numeric Pain Rating Scale (NPRS), Neer's impingement test, Hawkins-Kennedy test and self-made questions were used to find the frequency of shoulder impingement and its association with sleeping posture in adults. Demographical data was analyzed by SPSS showed that the frequency of SI reported in patient was 33.9% and its association with sleeping posture was P value 0.007



CONCLUSION

This study conducted that there is a significant association between shoulder impingement with sleeping postures in adults

METHODOLOGY

Study Design: Cross-sectional study

Sample Size: The sample size for this study is 377 which is calculated through Rao-soft

Sampling Technique: Non-probability convenient Sampling Technique

Study Setting: Physical therapy OPDs of twin cities hospitals

ACKNOWLEDGEMENT

At the very outset I owe all of my heart-felt gratitude to the real Blessor of the universe, Allah Almighty and His Holy Prophet "MUHAMMAD" (peace and blessings of Allah be upon him).

REFERENCES

1. The Mitchell C, Athreya A, Hay E, Carr A. Shoulder pain: diagnosis and management in primary care. *BMJ Clinical research ed.* 2004;328(7420):1024-6.
2. Tengirakulwach S, Rakkrid A. Analysis of possible risk factors for subacromial impingement syndrome. *World journal of orthopaedics.* 2012;3(1):8-8.
3. Garvink C, Iakob S, Bauer I, Nadja R, Brunner UH. Impingement Syndrome of the Shoulder. *Shack Arthrosc Int.* 2017;11(4):763-76.
4. Cunningham G, Lüdemann A. Revisiting anterior shoulder impingement: A literature review. *International journal of orthopaedics.* 2019;42(2):369-68.
5. Consiglio P, Radko O, Levy O, Shose G. Subacromial impingement syndrome: management challenges. *Orthopaedic research and reviews [Internet].* 2018; 2018; 10(3):81 [p.]. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6376463/>
6. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6376459/>
7. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6376457/>

Frequency Of Neck Pain And Its Association With BMI And Thoracic Hypomobility In University Students

SUPERVISOR: DR. ANEELA ZIA, STUDENTS: HUDA FATIMA, SAHERA AYAZ, ARISHA ZAINAB

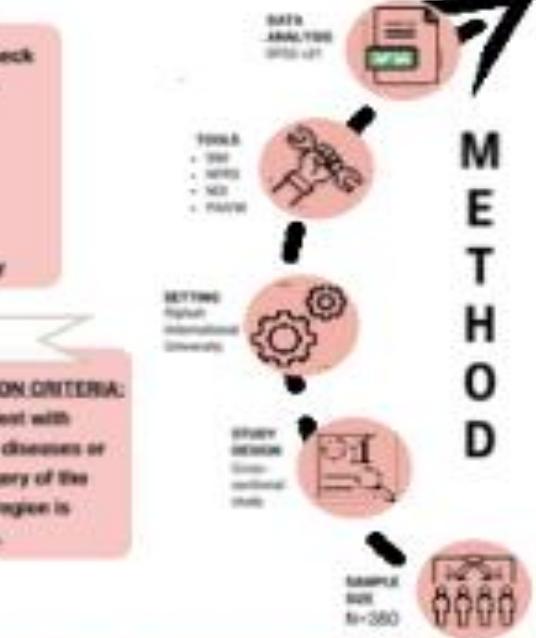
INTRODUCTION

Neck pain (NP) is defined as pain in the cervical region with or without pain referred to one or both upper limbs that lasts for at least 1 day. [1] There's a high prevalence of 12% to 20.8% in the general population of Pakistan, with even higher rates among undergraduate students. [2]



RESULTS

- The study's participants had a mean age of 21.24±1.58 years, with ages ranging from 18 to 25.



METHOD

PARTICIPANTS

INCLUSION CRITERIA

Female students aged 18-25 with acute, subacute, and chronic pain are eligible.

EXCLUSION CRITERIA

Any student with systemic diseases or with surgery of the cervical region is excluded.

| Neck Pain | Overweight | Normal | P value |
|-----------|------------|--------|---------|
| Yes | 60.0% | 40.0% | >0.05 |
| No | 50.0% | 50.0% | >0.05 |

| Neck Pain | Underweight | Normal | Overweight | Obese | P value |
|-----------|-------------|--------|------------|-------|---------|
| Yes | 20.0% | 40.0% | 30.0% | 10.0% | <0.05 |
| No | 20.0% | 40.0% | 30.0% | 10.0% | <0.05 |

| NP vs. Non-NP | NP | Non-NP | P value |
|---------------|-------|--------|---------|
| Underweight | 20.0% | 10.0% | <0.05 |
| Normal | 40.0% | 40.0% | >0.05 |
| Overweight | 30.0% | 30.0% | >0.05 |
| Obese | 10.0% | 10.0% | >0.05 |



DISCUSSION

- Findings observed by sachdev S et al. (69.0%) and welenkiewicz CG et al. (49.2) align with current study's conclusion of 41.1% neck pain prevalence and the hypomobility in total population was observed as 42.0%. [3][4]
- The similar age group was studied in another study to determine the impact of smartphone addiction on neck pain and disability. [5] They reported significant association [$p=0.01$] between neck pain and disability. Similar findings are observed in the current study as statistical association between neck pain and disability is significant [<0.05].
- Shreya joshi et al. In a study on thoracic hypomobility observed that hypomobility could not be conclusively established as a causative factor in neck pain. [6] These results align with the current study as the statistical association between neck pain and hypomobility was insignificant [$p>0.05$].
- The statistical association between neck pain and BMI was insignificant. These results are consistent with a systematic review done in 2019 on factors affecting neck pain. [7]

CONCLUSION

The findings of our study concluded that neck pain and thoracic hypomobility was frequent among university students but the association of neck pain with BMI and upper thoracic hypomobility was insignificant. However, there is significant association between neck pain and neck disability.



REFERENCES

- Verhagen AP. Hypomobility measurement of neck pain. *Journal of Manipulative and Physiological Therapeutics*. 2001;24(7):426-431.
- Shreya J, Joshi A, Mital MEAT, Tawaray A, Mital M. Assessment of neck pain, cervical stiffness, and neck disability in students of engineering and medicine students, university of Hyderabad, Hyderabad, India. *Journal of Manipulative and Physiological Therapeutics*. 2010;33(7):453-458.
- Gaudichet A, Tardieu C, Gaudichet H, et al. Prevalence of neck pain among the undergraduate physical therapy students of university of Hyderabad, Hyderabad, India. *Journal of Manipulative and Physiological Therapeutics*. 2010;33(7):453-458.
- Welenkiewicz CG, Sachdev S, Joshi CG, Rajan DR. Studies of neck pain among medical students in Edinburg, PA. *Journal of Manipulative and Physiological Therapeutics*. 2000;23(7):452-456.
- Parkes A, Parkes M. The effect of thoracic hypomobility on neck function among patients with chronic neck pain. *Journal of Manipulative and Physiological Therapeutics*. 2000;23(7):452-456.
- Joshi S, Welenkiewicz CG. Assessment of neck thoracic posture and mobility in students of medical and paramedical students. *Journal of Manipulative and Physiological Therapeutics*. 2000;23(7):452-456.
- Joshi S, Joshi CG, Welenkiewicz CG, Tawaray A, Mital MEAT, Mital M. Risk factors for neck pain in neck pain in young adults. *Journal of Manipulative and Physiological Therapeutics*. 2000;23(7):452-456.



ERGONOMIC AND PSYCHOSOCIAL RISK RELATED TO UPPER EXTREMITY MUSCULOSKELETAL PROBLEMS IN COMPUTER USERS.



AUTHORS

AYESHA DAYOO, MINAHL, FATIMA, MALLIKHA NAZDER

JASIA KHALID

Supervised by:

Dr. Asmae Fatima

RIPHAH INTERNATIONAL UNIVERSITY, ISLAMABAD



Introduction

Computers are an integral part of life. Dependence on computers is increasing day by day and this makes people face several and several important 'laser' health issues. Without ergonomics design, long working hours can affect not only your weight, but also the muscles in your neck, upper back, shoulders and arms, causing strain and muscle fatigue and discomfort.

Objective

- To find ergonomic and psychosocial risks in computer users.
- To find the correlation between aeronautical activities and workstations.
- Perception of ergonomic factors and body position.

Methodology

• Cross sectional survey was performed by distribution of a pre-printed questionnaire among willing participants (IT Professionals), included recording demographic of all concerned data. The total used were:

- Measured upper extremity questionnaire (MEUQ)
- Rapid office strain assessment (ROSA)

Results

There is a significant association between MEUQ work station and rapid office strain assessment which ($p=0.004$).

There is a significant association between job control and ROSA with ($p=0.00$).

The association between MEUQ body posture and ROSA is non-significant with ($p=0.117$).

There is a significant association between job control and ROSA with ($p=0.131$). There is no significant association of job demand with ROSA ($p=0.134$).

Analysis

participants



Discussion

A study was conducted by Magedam last in 2020 in England on medical necessity of back, 52-21% back related. According to this study the computer workstation was another factor due to using the role of musculoskeletal complaints during the pandemic. The scores of the five evaluations using the ROSA method indicated a medium musculoskeletal risk for the control group.

Conclusion

The study finding shows that over 80% of computer users reported musculoskeletal problems in shoulder region. IT professionals had significant association with occurrence of musculoskeletal disorder in the upper limb. Advances in prevention and promotion of healthy use of computer including postural education and ergonomics.

Rapid Office Strain Assessment total categories of Patient



reference

1. Khan R, Buri A, Bohra R, Ali U. Knowledge and perception of ergonomics in computer users. *J Pak Med Assoc*. 2017;67(7):215-7.
2. Boudelle E, Sherry N. Effectiveness of ergonomics training on strength training and improving the balance of Central Faculty Function and Peripheral Balance. 2012.
3. Alzahrani H, Kasseb D, El-Halabi H, Sherry N. Ergonomic Training Reduces Musculoskeletal Disorders among Office Workers. *Respiratory Care* 2016;61(10):139-50.

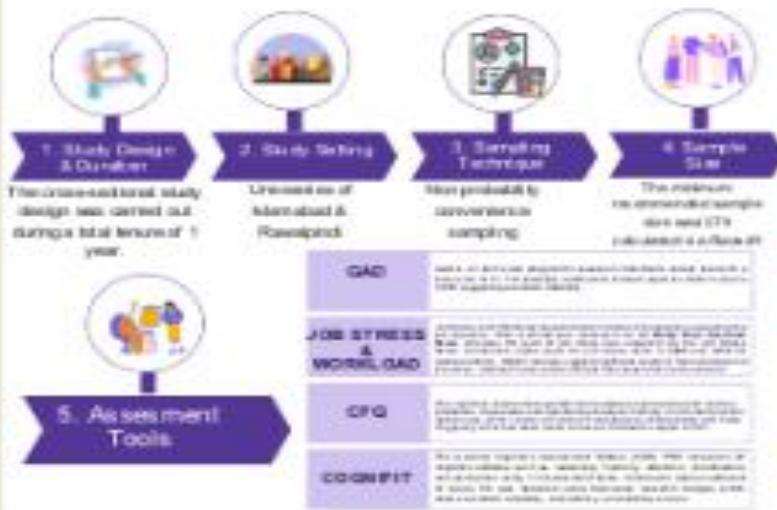
acknowledgment

Special thanks to DR. Asmae Fatima for the guidance throughout this research project. The Editorial Committee of the Department of Rehabilitation and Allied Health Sciences of Riphah International University approved this study. All participants gave written informed consent before data collection began.

INTRODUCTION

Teaching has been recognized as a very demanding career, they have been experiencing a higher level of work-related stress and anxiety, than any other profession. (1) Stress and anxiety appear to function similarly in terms of cognitive effects as they have been associated with a major negative impact on executive function. (2). Understanding the relationship between stress, anxiety, and cognitive changes will assist in raising awareness and possible initiatives can be designed to reduce exposure to stressful working conditions.

METHODS



OBJECTIVES



To determine the level of Stress and Anxiety among students by faculty

To determine the association of Stress and Anxiety with Cognitive abilities among university faculty.

第10章

• Identify and evaluate the strengths and weaknesses of the organization's strategic planning process.

卷之三



RESULTS



DISCUSSION

Two new species of *Leptostomella* (Leptostomellidae) from the Maldives, with notes on the biology of the genus. *Leptostomella* is a widely distributed genus of small, shallow-water polychaetes, with 120 described species and many more undescribed. The genus is found in all oceans, but is most abundant in the tropical and subtropical waters of the Indo-Pacific. The Maldives is a small island nation in the Indian Ocean, situated in the central part of the Maldives Archipelago. The Maldives is a biodiversity hotspot, with many unique and endemic species. The Maldives is a popular tourist destination, and the Maldives National Park is a protected area. The Maldives is a small island nation in the Indian Ocean, situated in the central part of the Maldives Archipelago. The Maldives is a biodiversity hotspot, with many unique and endemic species. The Maldives is a popular tourist destination, and the Maldives National Park is a protected area.

REFERENCES

CONCLUSION

ACKNOWLEDGEMENTS

With every salutation, we send all of my best and greatest to the most blessed of the universe, Allah Almighty, and to His Prophet, **SALAWATUH
ALAYH** the seal of **knowledge**, and guidance for the entire ummah.
Special thanks to my family, relatives and all **friends** by providing
my best services especially my wife, **cofounder**, **best** and **most** **supportive**
among the group of the most **trusted**.

Session 3

Non-Communicable diseases and Psychological Health

| | |
|-------------|--|
| S.no | Chair by: Prof. Dr. Qamar Mehmood |
| | Jury Member: Dr. Hina Tariq |
| 1. | Prevalence of Burnout and Its Association with Cognition In Physiotherapists. |
| 2. | Frequency of obsessive-compulsive disorder and its association with depression and academic performance in physical therapy students |
| 3. | Risk factors profile for major non-communicable diseases among university students |
| 4. | Relationship of BMI and physical fitness in community dwelling elderly adults |
| 5. | Association Between Physical Activity with Migraine, Sleep Quality and Quantity In University Students. |
| 6. | Relationship of glycemic index with psychological health and lower extremity functions in patients with type 2 diabetes mellitus. |
| 7. | Frequency of Foot Deformities and Their Association with Walking Speed in Patients with and without Diabetic Neuropathy. |
| 8. | Frequency of Academic Stress Among Final Year Physical Therapy Students and Its Association with Sleep and Quality of Life. |
| 9. | Knowledge, attitude and practice towards cardiovascular diseases risk factor in undergraduate students |

Prevalence Of Burnout And Its Association With Cognition In Physiotherapists

Authors

Aqsa Shereen Farooq, Mian Shafiqul Haq, Sajid
Riaz, Sajid Iqbal, Sarmad Aslam

Affiliations

Riphah International University

INTRODUCTION

Burnout appears as a situation in which there is a depersonalization, a lack of empathy, emotional exhaustion, a symptom of emotional fatigue, and a diminished feeling of personal accomplishment as a sign of diminished competence and achievement.

It may hurt mental health by resulting in cognitive problems such as poor focus, memory problems, and decreased output. Furthermore, impacting their general psychological well-being is the possibility that people would lose interest in once enjoyable pursuits.

The frequency of burnout and its association with cognition among physical therapists working in both clinical and academic settings are the primary content areas of this study.

OBJECTIVE

- To find the prevalence of burnout among educationally involved and clinically engaged physiotherapists.
- To determine the impact of burnout on cognitive performance in physiotherapists.

PARTICIPANTS

Inclusion Criteria:

- Male/Female physiotherapists
- Minimum 5 working days per week.
- Minimum 6 months experience

Exclusion Criteria:

- Medication or physical illness.
- Other neurological conditions.

METHODOLOGY

Study Design:

Cross-sectional study

Sample Size:

N = 377 physiotherapists

- 154 (41.1%) males

- 223 (58.9%) females

Study Setting:

Hospitals and Universities of both cities

Data Analysis:

- SPSS version 21

Data Collection Tools:

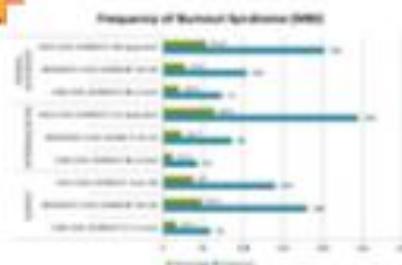
- Maslach Burnout Inventory (MBI)

- Cognitive Assessment Questionnaire (CAQ)

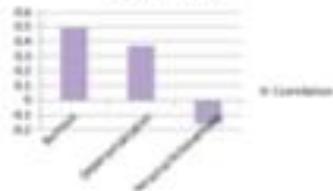


RESULTS

- The findings of the study suggested that burnout was highly prevalent among physiotherapists ranging from low level burnout to high level burnout with a total percentage of 99.45%.
- Also the findings showed that there was a significant association between burnout and cognition ($p=0.00$).



Correlation



DISCUSSION

- The findings of our study suggested that burnout was highly prevalent among physiotherapists ranging from low level burnout to high level burnout across three sections of MBI with a total percentage of 99.45%. In another study, prevalence of burnout syndrome in physiotherapists throughout the three sections of MBI was recorded to be moderate level with only 7.0% with high level burnout.
- Our study indicating cognitive impairment as an important domain of burnout syndrome has 81.8% individuals indicating a significant decline in cognitive function. Whereas, an other study states while it is a strong domain but not the most affected one with 16.7% of population showing cognitive decline as a result of burnout syndrome.

CONCLUSION

The present study focused on the degree of burnout along with how it related to cognition in physical therapists who pursued careers in both clinical and academic settings. Based on the study's findings, it is indicated that there is a substantial inverse association between burnout and cognition, with clinical physical therapists reporting higher levels of burnout and cognitive deterioration than their academic counterparts.

Related Literature

- Galalay R, Kinross J, Anilamparambil T. Factors associated with burnout syndrome in surgeons: a systematic review. *The Annals of The Royal College of Surgeons of England*. 2020;102(6):401-7.
- Costeira RM, Jorge RR. The Relationship between Burnout and Well-being Using Social Support, Organizational Justice, and Long Learning in Healthcare Specialists from Portugal. *Medicina (Bogotá)*. 2023;59(7):1252.
- Seixas A, Marques T, Moreira-Silva F, Almeida J, Ventura N, Rodriguez S. Burnout in Portuguese physiotherapists: prevalence and influencing factors. *International Journal of Occupational and Environmental Health*. 2020 Apr; 26(4):37-47.
- Al-Fraij OM, Al-Ghobaidi HI. The prevalence and severity of burnout among physiotherapists in an Arabian setting and the influence of organizational factors: an observational study. *Journal of physical therapy science*. 2014;26(8):1493-6.

Frequency of OCD and its association with Depression and Academic performance

Mahrul Banday 3589 ; Mehr-un-Nisa 3536 ; Asima Khalid 3751 ; Sawair Zahoor 3610 ; Fiza Chandio 3415

Supervisor Dr. Aysha Bashir

Doctor of Physical Therapy (DPT)

INTRODUCTION

Obsessive-Compulsive disorder (OCD) is a common, disabling, psychiatric disorder characterized by intrusive and unwanted thoughts/images or urges that cause distress or anxiety and repetitive thoughts or actions that the person feels driven to perform. (OCD) is the fourth most prevalent mental condition globally, with an incidence of about 2.3%, primarily manifesting in teenagers and young adults. Undergraduate medical students face an elevated susceptibility to Obsessive-Compulsive Disorder (OCD), attributed to the demanding and stressful nature of medical schools.(2) Likely obsessive-compulsive disorder (OCD) appears to be more prevalent among medical students in comparison to the general population, and it is associated with manifestations of depressive symptoms. The stress inherent in medical education, which is associated with symptoms of depression and anxiety, has been implicated in the generation of academic performance challenges. It is postulated that heightened levels of anxiety or depression in young individuals may contribute to a decline in academic achievement.(3)

OBJECTIVES

- To determine the frequency of Obsessive Compulsive Disorder in Physical Therapy students.
- To determine the association of OCD with depression in Physical Therapy students.
- To determine the association of OCD with academic performance in Physical Therapy students.

METHODS

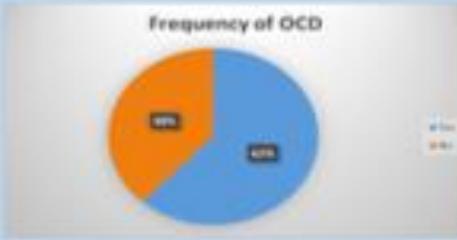
The Cross-sectional study design was used. The research was conducted in universities of both cities (Islamabad and Rawalpindi). The study duration was 1 year after the approval from REC. The sample size was 375 calculated by Raosoft. Non-probability Convenience Sampling technique was used. Scales used were (Obsessive Compulsive Inventory-Revised(OCI-R) for diagnosis of OCD, Yale-Brown OCD Scale(YBOS) to check severity of OCD and Montgomery-Asberg depression scale (MADRS) for depression.

PARTICIPANTS

- Participants between the Age group 18 to 30 years were selected.
- Students diagnosed with any psychological issues and mental disorders were exclude from the study.

RESULTS

The OCD frequency was 62%, indicating that out of 915 students, 566 were diagnosed with OCD. Among positive respondents, 21.1% (120) were male and 40.9% (274) were female.

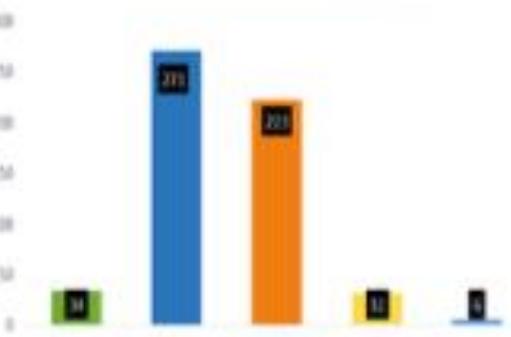


For OCD severity, among the 566 students with OCD, 36 exhibited subclinical symptoms, 271 had mild symptoms, 223 showed moderate symptoms, 32 had severe symptoms, and 6 had extremely severe symptoms. Our analysis revealed that 70% of OCD patients also experienced depression.

The association between OCD and depression yielded a significant P -value < 0.001 and a correlation coefficient of 0.0325, emphasizing a substantial connection. Assessing the association of OCD with academic performance, we obtained a P -value of 0.058 and a correlation coefficient of -0.060, indicating a negative association between OCD and academic performance.

RESULTS

Severity of OCD symptoms



| | Female | Male |
|----------------------|--------|--------|
| Depression | 0.000 | 0.025 |
| Academic Performance | 0.058 | -0.060 |

DISCUSSION

The objective of the study was to determine the frequency of obsessive-compulsive disorder in physical therapy students and its association with depression and academic performance. Current study reported moderate frequency of OCD in physical therapy students. A study conducted in 2021 concluded that the OCD prevalence is high among medical students.(4) Our study concluded that most of the students have mild level of symptoms of OCD. A study conducted in 2021 presented the results as percentages of OCD symptoms prevalence among university students which showed that approximately 98.2% have OCD symptoms (ranging between mild to extreme).(5)

Current study also concluded that there is significant association of OCD with depression but there is no association of OCD with academic performance. A study conducted in 2021 also affirms that the presence of OCD is likely to affect academic performance. A study conducted in 2015 suggests that many factors are strongly associated with depression in OCD.(6)

CONCLUSIONS

Current research indicates that moderate frequency of OCD symptoms is found in Physical therapy students and OCD is significantly associated with depression but there is no association of OCD with academic performance.

REFERENCES

- Osman M, Stevenson J, Haslak JA, Norgate RJSP. Anxiety and depression in academic performance: An exploration of the mediating factors of worry and working memory. 2012;20(8):433-439.
- Butt H, Majeed SGA, Khalid B, Wahab Z, Ahmed W, Jabbir M. Development of Obsessive-Compulsive Disorder in Medical Versus Dental Practitioners During Covid-19 Pandemic. *Pakistan Journal of Medical & Health Sciences*. 2022;16(6):1489-.
- Tahir TMU, Al-Bethal SAI, Abu-Shanab AA, Ghazi HF, Abdo H, JMEOP. Prevalence of obsessive-compulsive disorder (OCD) among Iraqi undergraduate medical students in time of COVID-19 pandemic. 2021;28(1):1-6.
- Khalid AM, Alshabani SK, Bin FB, Ansari R. The prevalence of obsessive-compulsive disorder and symptoms among medical students: A participatory study from Riyadh, Saudi Arabia. *Med Sci*. 2021;29(14):2095-96.
- Altintas E, Taghizadeh H. Factors associated with depression in obsessive-compulsive disorder: a cross-sectional study. *Arch Psychiatr Anad*. 2015 Dec;20(12):1346-54.
- Mohd A S. Obsessive-Compulsive Symptom Prevalence among University Students and Associated Demographic Variables. *Instruction to Authors*. 2021;32(5):79-85.

ACKNOWLEDGEMENTS

I would like to express my heartfelt gratitude to our dedicated teacher, Aysha Bashir, for her unwavering support and guidance throughout our research journey. Special thanks to the students and faculty of Ismail International University, Margalla University, and Riphah International University, for their enthusiastic participation and cooperation in contributing valuable data to our study. Their collaborative efforts have significantly enhanced the depth and breadth of our research.

RISK FACTORS PROFILE FOR MAJOR NON-COMMUNICABLE DISEASES AMONG UNIVERSITY STUDENTS

Authors: Pashmej Mian, Roma Wahid, Safa Butt, Supervisor: Dr Abrish Habib Abbasi
Affiliation: Riphah International University Gulberg Green campus, Islamabad

Non-communicable diseases (NCDs) are those that last for a very long time that cannot spread through infection or through other people but are typically caused by unhealthy behaviours and/or long-term combination of genetic, physiological, environmental and behavioural factors.

Introduction

NCDs are the leading cause of death and disability worldwide, accounting for 74% of all deaths. According to WHO, Pakistan has a high burden of NCDs, with NCDs causing 52% of total deaths and 41% of DALYs in 2010. A study by Montane et al (2012) on the NCD risk factors among nursing students concluded they had a high risk of NCD and needed educational programs to improve their health habits. In Pakistan, there is a lack of regional or sub-national estimates of NCD risk factors and their association with NCD outcomes. Major NCDs are linked with their leading behavioral risk factors (tobacco use, harmful use of alcohol, physical inactivity, and unhealthy diet). In turn, these behaviors lead to key metabolic/physiological changes. Globally, physical inactivity has a significant impact on health. Addressing the high prevalence of common modifiable risk factors among university students and promoting healthy behaviors through life style advice can help to reduce global burden of non-communicable diseases in this study population.

Objective

To determine risk factors profile for major non-communicable diseases among university students.

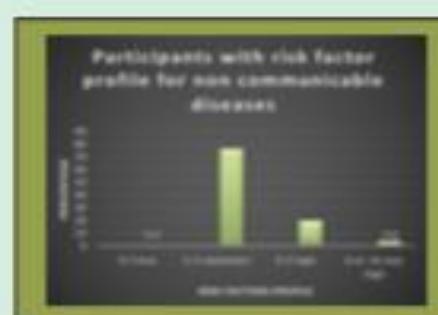
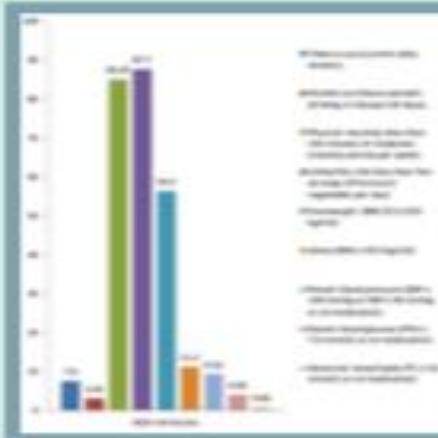
Methodology

- A descriptive cross-sectional study 590 students (informed consent)
- Data was collected using the World Health Organization (WHO) stepwise tool for NCD
- It consists of two steps:-
- Step 1 (Interview)
- Step 2 (Physical Measurements)

Discussion & Conclusion

Numerous research studies have documented a high frequency of various non-communicable disease risk factors among international university students. For instance, a survey of university pupils from 24 different countries revealed that 15.9% had a total of three or more behavioral risk factors for non-communicable diseases. Similar results were seen in another study of university students in nine Asian nations, where 18.5% had three or more NCD risk factors. 76.3% of the patients in the current study had two to three behavioral risk factors, such as being overweight, eating poorly, and not exercising. The results of current study correlate with the previously published literature. The current study concluded a moderate risk of developing non-communicable diseases among students.

Results



Analysis

Data analysis was done by using IBM SPSS Statistics, Version 25.0. Mean and standard deviation were used to summarize numerical variables as per their distribution. Nominal variables were summarized as frequency and percentage. Weighted prevalence of behavioral and biological risk factors were calculated with their 95% confidence interval.



References

-Wisek LZ, Verneris M, Sjogren MM, Gammie SS, Lohr D, et al. (2003) High prevalence of H1N1, H3N2 and H5N1 avian influenza viruses in swine herds. *Journal of Veterinary Diagnostic Investigation* 15:223-232. doi:10.1177/1040638403251012

-Wrighton S, Pritchard R. Pneumonia and bronchitis as a clinical sign. Determination of the fraction of cases due to *Escherichia coli* and *Haemophilus ducreyi*. *Journal of Public Health* 20:177-185. doi:10.1093/pubmed/fcd026

-Yaduvanshi S, Deekshatulu B, Venkateswaran K. *Escherichia coli* O157:H7, Shiga Toxin-Producing *Escherichia coli*, O157:H7 Virulence, Virulence and Virulence in *Escherichia coli* O157:H7. *Journal of Clinical Microbiology* 43:1070-1076. doi:10.1128/JCM.43.3.1070-1076.2005

RELATIONSHIP OF BMI WITH THE PHYSICAL FITNESS IN COMMUNITY-DWELLING SENIOR ADULTS



AUTHORS

SCOTT A. BROWN, CLAUDIO MUSOLE, TREVORIA PRESTON

INSTITUTIONS

CREADIS INSTITUTE

DEPARTMENT OF PHYSICAL EDUCATION, UNIVERSITY OF TORONTO

REVIEWED BY

Obesity is a progressive, underlying condition that negatively impacts the health of an individual. The progression of obesity is often associated with a variety of diseases.

Obesity, like most conditions, increases the risk of developing other diseases.

Physical activity can reduce the risk of developing and maintaining obesity. Activities, including, but not limited to:

- Walking, cycling, swimming, running, stretching, and strength training.

Obesity, like most other health conditions, has a variety of risk factors associated with it. These include:

- Age, gender, ethnicity, and family history.

Obesity, like most other health conditions, has a variety of risk factors associated with it. These include:

- Age, gender, ethnicity, and family history.

RESULTS

No study has determined the relationship between BMI and physical fitness in community-dwelling senior adults.

METHODS

Descriptive design. 238 seniors were recruited using convenience sampling. Data collection took place over a period of 12 months.

SELECTION CRITERIA

INCLUSION
Male gender.
Ages 60-79 years.
Ability to ambulate.
No cognitive impairment.

EXCLUSION
Any history of:
Acute stroke.
Acute MI.
Hepatitis.
Visual problems.

DATA ANALYSIS

Data analysis employed SPSS 20.0. The mean correlation was determined for each of the Physical Fitness Tests.

DATA

| TEST | MEAN | SD | MIN | MAX |
|-----------------------------|-------|-------|-------|--------|
| Age | 72.01 | 4.98 | 62.00 | 82.00 |
| Weight | 71.24 | 14.07 | 32.00 | 110.00 |
| BMI | 26.01 | 4.17 | 16.00 | 40.00 |
| Chair Stand Test | 26.97 | 4.98 | 20.00 | 35.00 |
| Arm Curl Test | 22.97 | 4.98 | 16.00 | 35.00 |
| Chair Sit & Reach Test | 26.97 | 4.98 | 20.00 | 35.00 |
| Body Mass Index Test | 27.00 | 4.98 | 16.00 | 40.00 |
| Push Up & Curl Test | 26.97 | 4.98 | 20.00 | 35.00 |
| Modified 6-Minute Walk Test | 17.97 | 4.98 | 12.00 | 25.00 |

MEAN PHYSICAL FITNESS TESTS

| TEST | MEAN |
|--|-------------------|
| Age | 48.27 \pm 6.46 |
| Weight | 72.27 \pm 14.27 |
| BMI | 26.23 \pm 4.37 |
| Chair Stand Test | 4.09 \pm 0.46 |
| Arm Curl Test | 4.09 \pm 0.79 |
| Chair Sit & Reach Test | 4.09 \pm 0.96 |
| Body Mass Index Test | 4.09 \pm 0.51 |
| Push Up & Curl Test | 4.09 \pm 0.67 |
| Walk over 6 minutes, using a phone (mean 2 mins) | 7.93 \pm 2.46 |
| Modified 6-Minute Walk Test | 46.29 \pm 12.27 |

PARTICIPANT DEMOGRAPHIC AND PHYSICAL FITNESS

DATA ANALYSIS

DISCUSSION

Four et al. (2013) observed that senior adults who were older than 65 had the highest BMI (26.27 \pm 4.27) and the lowest physical fitness (1.81 \pm 0.21) compared to those aged 55-64 (25.21 \pm 3.71) and 45-54 (23.71 \pm 3.61). In females, the mean BMI was 26.12 \pm 4.21 and the mean physical fitness was 1.81 \pm 0.21.

Obesity, like most other health conditions, is negatively correlated with physical fitness.

Obesity, like most other health conditions, is negatively correlated with physical fitness.

CONCLUSION

The results demonstrated that there was a significant negative correlation between BMI and physical fitness. Therefore, there was a significant relationship between obesity and physical fitness in this population.

ACKNOWLEDGEMENTS

We would like to give special thanks to our research participants for their significant support with our research. Additionally, we would like to thank the research process for the trial.

REFERENCES

1. Brown, S.A., Dorey, C., & Mole, C. (2013). The association between the relationship of physical activity and physical fitness in community-dwelling seniors. *Journal of Aging Studies*, 27(2), 202-208.

2. Brown, S.A., Dorey, C., & Mole, C. (2013). Physical activity and physical fitness of elderly people in rural and urban areas. *Journal of Aging Studies*, 27(2), 202-208.

3. Brown, S.A., Dorey, C., & Mole, C. (2013). Physical activity and physical fitness of elderly people in rural and urban areas. *Journal of Aging Studies*, 27(2), 202-208.

4. Brown, S.A., Dorey, C., & Mole, C. (2013). Physical activity and physical fitness of elderly people in rural and urban areas. *Journal of Aging Studies*, 27(2), 202-208.

ASSOCIATION OF PHYSICAL ACTIVITY WITH MIGRAINE, SLEEP QUALITY AND QUANTITY

AUTHORS

Arwa Fatima,
Hilma Naghmeh Kausar,
Maysoon Waleed, Aseer Sabah

SUPERVISOR

Dr Zahra Jaz
Ripah International University



INTRODUCTION

About 10% of the world's population is affected by migraine and physical activity is considered as one of the major factor for worsening of this situation. Studies reported that our young population has lack of sleep hours that affect their cognitive function insomnia considered as predisposing factor for migraine which markedly affect their Physical Functioning & QOL.

PARTICIPANTS



Inclusion Criteria:

- Healthy university students
- Both genders
- Age: 18-25 years

Exclusion Criteria:

- Any neurological, musculoskeletal, systemic diseases or deformities

DATA COLLECTION TOOLS



1. Migraine Screening Questionnaire
2. Migraine Specific QoL Questionnaire
3. International Physical Activity Questionnaire
4. Pittsburg Sleep Quality Index

DISCUSSION

- Our findings are consistent with a study that the association between physical activity and sleep quality did not reach statistical significance.
- Another study identified a significant association between migraine and physical activity. Inactive individuals had a higher likelihood of experiencing migraines.



CONCLUSION

In conclusion, this study highlights the positive correlation between high levels of physical activity and low incidence of migraine. Conversely, no significant relationship was found between sleep and physical activity concerning migraines. Further research is recommended to explore the potential mediating factors between migraine and sleep quality.



To study independent and combined associations between physical activity with migraine, sleep quality and quantity in university students.

OBJECTIVE

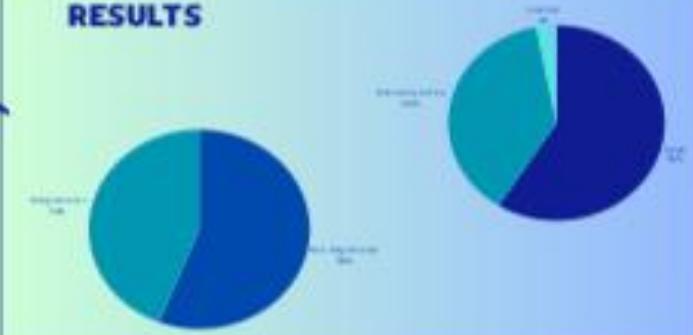


METHODOLOGY

- Sample size - 783 Participants
- Study Design - Cross sectional Survey
- Study Setting - Universities of twin cities
- Data Analysis - SPSS Version 25



RESULTS



As for the physical activity level of participants **58.1%** were highly active whereas **98%** students were reported to have low quality of sleep. The following Table shows significant Association calculated by chi square between Physical activity and Migraine. ($p= 0.001$)

No Significant association was found between Sleep Quality and Physical Activity. ($p= 0.153$)

Table : Association of Physical Activity Levels with Migraine & Sleep Quality

| | P-Value |
|-----------------------------------|---------|
| Physical Activity * Migraine | 0.001 |
| Physical Activity * Sleep Quality | 0.153 |
| Migraine * Sleep Quality | 0.048 |

1. Arora S, Kaur S, Singh S, Kaur H, Singh A. Physical activity and sleep quality. Indian J Med Microbiol. 2013;31(2):227-230.
2. Hwang P, Hsu C, Lin C. The link of physical activity to low sleep quality and high daytime fatigue. Sleep Med. 2009;10(10):1203-1208.
3. Hwang P, Hsu C, Lin C, Lin C. Correlation of exercise with sleep quality. J Clin Endocrinol. 2013;125(1):101-106.

FREQUENCY OF FOOT DEFORMITIES AND THEIR ASSOCIATION WITH WALKING SPEED IN PATIENTS WITH AND WITHOUT DIABETIC NEUROPATHY

Neha Raheel, Rukhsar Amin, Saffiyah Gulam

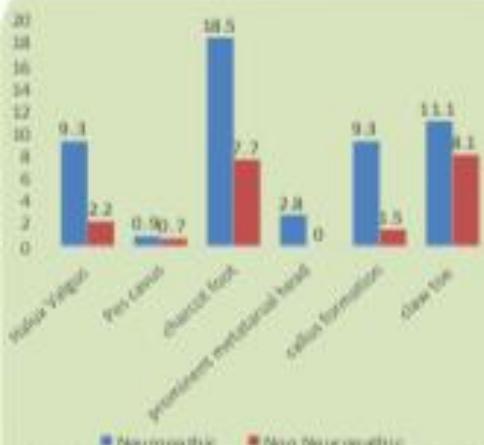
INTRODUCTION

Foot deformities are observed to be common among diabetic patients due to pathophysiological changes in muscle mass reduction and poor blood supply. Currently every 9th person is diagnosed with diabetes. List of disabilities and complications associated with it is an emerging challenge to diagnose and treat earlier.

Foot deformities were observed in diabetic patients but frequency of foot deformities in neuropathic and non-neuropathic patients and its association with walking speed were not separately observed yet.(1)

PARTICIPANTS

- Male and Female of age >40 years.
- >4 years of diabetes
- Without any prior lower extremity orthopaedic problems



Graphical presentation of percentages of foot deformities in patients with and without diabetic neuropathy

DISCUSSION & CONCLUSION

A cross-sectional study was conducted in Jordan in 2020. 1000 patient were examined to determine the prevalence of diabetic patients with foot deformities of which hallux valgus, claw toe, prominent metatarsal head, pes cavus, charcot foot and amputations were observed.(2)

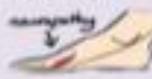
From the list of foot deformities, frequency of charcot foot was higher in both neuropathic and non-neuropathic patients, while claw toe was higher in non-neuropathic patients only. Foot deformities have a strong positive association with walking speed in diabetic neuropathic patients while no association was found in non-

REFERENCES

1. Eather C-L, Bilezikian OAA, Aranazulu R-M, Gabril G-N&TV. Foot deformities in patients with diabetic mellitus (with and without peripheral neuropathy). 2021; 30(3): 346-51.
2. Alabriyah A, Bakri RG, Khader Y, Lazarini R, Ajlouni KJDR. Prevalence and association of 8 foot deformities among patients with diabetes in Jordan. 2020; 16(5): 471-82.

OBJECTIVES

To determine the frequency of foot deformities and the association of foot deformities with walking speed in patients with and without diabetic neuropathy.



METHODS



RESULTS

- Out of 379, 187 (49.3%) were female while 192(50.7%) were male. Mean \pm SD of age was 35.19 \pm 8.829.
- BMI was observed and mostly were overweight with 178 (47.0%) followed by obese 126(33.2%), healthy weight 73(19.3%) and underweight 2(0.5%).
- Frequency and percentage of diabetic patients with neuropathy was 108 (28.5%), and without neuropathy was 271 (71.5%).
- 283 (77.3%) patients had completed 10-meter walk test with a speed ranging between 0.60-1.10m/s, 38(10%) had speed ranging from 0.10-0.60 m/s, 47(12.4%) had speed ranging from 1.10-1.60 m/s. Only 1(0.3%) had speed more than 1.60 m/s.

| Neuropathy | | Significant value |
|------------|-------------------|-------------------|
| Yes | Type of deformity | 0.002 |
| Yes | Speed Range | |
| No | Type of deformity | 0.000 |
| No | Speed Range | |

Correlation is significant at the 0.01 level

ACKNOWLEDGEMENTS

We would like to acknowledge our indebtedness and render our warmest thanks to The Diabetes Centre (TDC), Riphah International University, our respected Supervisor and the whole faculty of Rehabilitation and Allied Health Sciences.

KNOWLEDGE, ATTITUDE AND PRACTICE TOWARDS CARDIOVASCULAR DISEASES AND RISK FACTORS AMONG UNDERGRADUATE STUDENTS

Presented by

MAHNOOR PERZADA (3701), NARAYANAN RIZWAN (3747), SHAILESH KHAREL (3435), ADOA TALIB (3407), ALI SHAFI & FATHIAZ (3310)

INTRODUCTION

Cardiovascular diseases are the number one cause of death globally. The WHO statistics indicate that CVD related deaths are seventeen million yearly, and this amount is gradually increasing up to twenty three million by the end of 2030 (Kumar, 2017). In Pakistan, cardiovascular diseases are also the leading cause of morbidity and mortality. Prevalence data for the Cardiovascular diseases is less. Thirty to forty percent of all deaths in Pakistan are the result of cardiovascular diseases. Major risk factors for CVD include age, gender, heredity, hypertension, cigarette smoking, hypercholesterolemia, diabetes, obesity and physical inactivity. The current study was conducted to understand the knowledge, attitude and practice (KAP) of University students regarding cardiovascular diseases.

OBJECTIVES

Determine the knowledge, attitude and practice towards cardiovascular diseases risk factors in undergraduate students.

MATERIAL AND METHODS

Cross sectional study design (KAP) Questionnaire

Sample size
773 (588 female
- 185 male)

Participants: Undergraduate students (Universities of Rwanda and Isiamabadi)

• Indication criteria:

• सिंचान गतिविधि

University students
Age 18 to 25 years
Both gender male and
female are included
Medical and non-
medical students are
included

RESULTS

Pearson correlation

| | RValue | PValue |
|--------------------|--------|--------|
| Model A vs Model B | 0.3 | <0.01 |
| Model C vs Model D | 0.05 | 0.13 |
| Model A vs Model C | 0.52 | 0.14 |

Mean age of our participants was 29 years, among all participants females were 54.8 and males were 18.6 moderate knowledge with the mean score of 7.5, while male was poor with the mean score of 12.1 and females with the mean score of 16. A correlation students' significant and moderately positive correlation found between knowledge and attitude only with $p < 0.01$.

| Variable | | Kwartaalwaarde Waarde 2020 | Wekselende Waarde 2021 | Wekselende Waarde 2022 |
|--------------|---------|-------------------------------|---------------------------|---------------------------|
| Gebruik | Waarde | Waarde (%) | Waarde (%) | Waarde (%) |
| Grootbedrijf | 100% | 100.000 | 100.000 | 100.000 |
| | Gebruik | 100.000 | 100.000 | 100.000 |
| Grootbedrijf | 100% | 100.000 | 100.000 | 100.000 |
| | Gebruik | 100.000 | 100.000 | 100.000 |

Current study demonstrates that no additional step is necessary to activate and use this in fact any conjugate, free thiol or RAFL can be used, even self-thiolated RAFL, and human T-cell receptor molecule, having conjugated thiol, can be used for this purpose. This is considered the advantage of a novel technique of RAFL conjugation.

CONCLUSION

Percentage of respondents who have had sex with men in the last 12 months and those who have had sex with women in the last 12 months. Sex with men is defined as sex with a male who is not the respondent's husband or partner. Sex with women is defined as sex with a female who is not the respondent's wife or partner. Sex with both men and women is defined as sex with both men and women. Sex with neither men nor women is defined as sex with neither men nor women. Sex with both men and women is defined as sex with both men and women.

DISCUSSION

These findings are similar to studies done to date on the impact of resistance training on the elderly. In our study, just as in others, the elderly in the training group had greater improvements in grip strength and upper extremity function. In addition, the elderly in the training group had greater improvements in self-care activities. In contrast, to some of the studies that found no benefit of resistance training in elderly women, we found that elderly women in the training group had greater improvements in grip strength and upper extremity function. This may be due to the fact that the elderly women in our study were more active than those in other studies.

These changes are not limited to the physical environment, however. In addition to the physical environment, the social environment is also a factor in the development of the disease process. The incidence of oral diseases in children seems to be influenced by social factors. These factors include the presence of other children in the home, the presence of other children in the neighborhood, and the presence of other children in the community. These factors are all related to the social environment of the child.

ACKNOWLEDGEMENT

"We would like to express our thanks to you for your support. We had little money for travel and local guides were not available. The support you gave us was greatly appreciated and we are grateful. The support will help us to continue our work in Tadzhikistan, especially by giving us time to travel, to make contacts and to establish new ones."

REFERENCES

GLIMPSES OF
Ist REHAB &
ALLIED
RESEARCH
SYMPOSIUM

Prof. Dr. Asghar Khan distributing Shields among Supervisors of Winning Research Groups



**Supervisor
for Best
Research
Poster Award**

**Supervisor
for Research
Innovation
Award**



**Supervisor for
Indigenous
Community
Research
Award**



Winning Students receiving Cash Prizes & Certificates of Appreciation



Best Research Poster Award

Research Innovation Award



Indigenous Community Research Award





DPT Spring 2023 Batch participated enthusiastically in 1st Rehab & Allied Health Research Symposia