



# 4TH YSRC 2024

YOUNG SCIENTISTS RESEARCH CONFERENCE

**1<sup>st</sup> October 2024**

VENUE: FOUNDATION UNIVERSITY  
SCHOOL OF HEALTH SCIENCES, DHA 1  
ISLAMABAD

For young enthusiastic  
undergraduate students of  
Health Care

## ABSTRACT BOOK

**MORE INFORMATION**

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Ext: 218,621,606

[www.fui.edu.pk](http://www.fui.edu.pk)

[srs.fush@fui.edu.pk](mailto:srs.fush@fui.edu.pk)





## **ABOUT FUSH**

The Foundation University School of Health Sciences (FUSH), a project of Fauji Foundation was established under a federal charter in October 2002. The University's programmes of study have been duly accredited by Higher Education Commission (HEC), National Computing Education Accreditation Council (NCEAC), Pakistan Engineering Council (PEC), College of Physicians and Surgeons of Pakistan (CPSP), Pakistan Medical and Dental Council (PM&DC) and Pakistan Nursing Council (PNC). The University has been rated as category 'W4' (the highest rating category) by the HEC and is also an ISO 9001:2008 Quality Management System Certified by the United Kingdom Accreditation Service.

At FUI, special efforts are also being made to develop collaborative provisions and linkages with other HEIs at national as well as international levels and to link the University with local community and corporate sector, especially Fauji Foundation industries. FUSH has signed a number of MoUs with different local and global Universities and is regularly pursuing these deeds in order to establish a vibrant mutual collaboration for the benefit of students, scholars and faculty.

There are more than five thousand students in the University. At FUSH, we counsel and provide career guidance to our students along with substantial opportunities for participation in various co-curricular and extracurricular activities to turn them into well rounded personalities. Additionally, the University strongly emphasizes on character building of not only the students but also the faculty. FUSH also provides financial assistance in the shape of scholarships to deserving, underprivileged and outstanding students. University has a well-established Alumni Club which provides a platform to the students to interact, inspire and benefit from the graduated students of the University.

## **WELCOME NOTE**

### **Warm Greetings!**

Welcome to the 4th Young Scientists Research Conference at the Foundation University School of Health Sciences on October 1st, 2024. This unique, student-led conference will highlight the research endeavors, leadership experiences, and innovative ideas of aspiring healthcare professionals. Our goal is to nurture a vibrant research culture among students from various healthcare disciplines.

The conference will showcase original research papers conducted by undergraduate students across basic, clinical, dental, rehabilitation, and nursing sciences. We are honored to host delegates from medical, dental, and rehabilitation sciences programs representing esteemed health institutes, universities, and colleges across Pakistan. We warmly welcome all participants and look forward to fostering long-lasting connections with you in future conferences. This conference provides a platform for knowledge-sharing and collaboration. The day will kick off with a Plenary Session, followed by parallel scientific sessions featuring OPs from diverse healthcare disciplines. You will have the flexibility to choose and attend sessions that align with your interests. In addition to the OPs, a Poster Exhibition will be held in the Exam Hall of the FUMC fifth floor. Here, students will display their original research work on 24" x 36" posters. During the dedicated poster session, authors will be present beside their posters, offering you the opportunity to engage in meaningful one-on-one discussions. This conference is more than just a series of presentations. It's an opportunity to establish connections with students and faculty from different institutions, paving the way for future collaborations. If you're one of our oral Presenter:s, we wish you the best of luck and look forward to your insights.

Refreshments and meals will be available at the stalls, with a 30-minute break for prayer and lunch. The conference will conclude in the afternoon with a Closing Ceremony, where we will acknowledge your valuable contributions and the efforts of our organizing team.

Please review the conference schedule and abstracts through the provided links in the booklet or on our website at [fui.edu.pk](http://fui.edu.pk) to plan your day. This Abstract Book serves as a resource for discovering colleagues and research that may complement your own work.

We hope you have an inspiring and engaging experience at the conference. If you need any assistance, our organizing committee members will be on hand to guide you throughout the day.

**Best Regards,  
Conference Team**



# 4<sup>th</sup> YOUNG SCIENTIST RESEARCH CONFERENCE

1<sup>ST</sup> October 2024

## CONFERENCE COMMITTEE HEADS WITH DIRECTOR FUSH



**Patron:** Professor Maj Gen Imran Fazal, HI (M) (Retd)

**Advisor Research Cell:** Professor Muzammil Hasan Najmi

**Conference Secretary:** Professor Sadia Ahsin

### Conference Committee Heads

Professor Huma Musarat Khan

Professor Fatima Kaleem

Professor Ayesha Janjua

Professor Nadia Zaib

Assoc Professor Jawwad Anis Khan

Dr. Muhammad Ehab Azim PT

Col. Rana Rashid Rehman

Mr. Tilawat Khan

### Student Research Society

#### Presidents

#### Vice Presidents

**FUMC**

Danish Ali

Ahmed Ali Khan

**FUCD**

Zuhayr Arif Jabbar Khan

Sabahat Shafique

**FUCP**

Mohammad Shafay

Maya Firdous

**FUCN**

Meerab Nasir Gill

## **CONFERENCE COMMITTEES**

### **SCIENTIFIC COMMITTEE**

**Head:** Prof. Huma Mussarat Khan

#### **Members**

1. Prof Naila Azam
2. Prof Fatima Kaleem
3. Prof Noshin Zaidi
4. Prof Madiha Imran
5. Prof Nadia Zaib
6. Dr. Tahira Amjad
7. Dr. Hira Ashraf
8. Dr. Sana Masood
9. Dr. Fizza Sehar Anwar
10. Dr. Tayyaba Tajamul
11. Mr. Mohammad Mehmood Zeeshan
12. Mr. Tilawat CMS Coordinator

### **ORGANIZING COMMITTEE**

**Head:** Prof. Sadia Ahsin

#### **Members**

1. Prof Rozina Nazir
2. Prof Nadia Zaib
3. Prof Ayesha Janjua
4. Prof Madiha Imran
5. Dr. Jawad Anis Khan
6. Dr. Hira Ashraf
7. Dr. Batool Zahra
8. Dr. Ammara Abid
9. Dr. Muhammad Ehab Azim
10. Dr. Sehar Khaliq
11. Dr. Tayyeba Iftikhar
12. Dr. Bushra Tariq
13. Dr. Ayesha Ali
14. Dr. Jaweria Sharafat
15. Dr. Warda Mazhar
16. Dr. Hajira Siddique
17. Dr. Fizza Sehar Anwar
18. Dr. Saman Shaukat
19. Mr. Ajmal Jadoon
20. Mr. Saqib Hanif
21. Mr. Tilawat

### **All Presidents and Vice Presidents of FUSH, SRS Members Student Research Society**

#### **MEMBERS FUMC**

##### **Final Year**

1. Farooq Kamran
2. Asher Tariq

##### **4th Year**

1. Hurmat Fatima Bhatti
2. Tanveer Qazi

##### **3rd Year**

1. Fatima Khalid
2. Muhammad Owais Mazhar
3. Aleena Ahmad
4. Areeba Ahsan

##### **2nd Year**

1. Eesha Noor
2. Mahnoor Khan
3. Tahrim Saqib
4. Mustafa Hamid Khan
5. Asad Ur Rab
6. Malaika Rasheed

##### **1st Year**

1. Ehtisham Khan
2. Syed Zeeshan Ahmad
3. Bisma noor ul huda Niazi
4. Haleema Sajid

# 4<sup>th</sup> YOUNG SCIENTIST RESEARCH CONFERENCE

1<sup>ST</sup> October 2024

## MEMBERS FUCD

### Final Year

1. Anoosha Usman
2. Toba Kamran
3. Attiya Batool
4. Khadija Binte Nawaz
5. Maida Nasir Khan

### 2nd Year

1. Aliya Batool Zaidi
2. Maham Ghazan
3. Shameem Khattak
4. Maheen Ahmed
5. Hamza Imtiaz

### 3rd Year

1. Ayesha Arif
2. Eman Khan
3. Rabiya Irfan
4. Mohammad Khubaib

### 1st Year

1. Khowla Shah
2. Ramee Kamran
3. Syed Muhammad Abdullah
4. Muhammad Armughan Ahmed

## MEMBERS FUCP

### 10<sup>th</sup> Semester

1. Rafia Khawar

### 8<sup>th</sup> Semester

1. Farwah Tabassum

### 6<sup>th</sup> Semester

1. Areena Tariq
2. Hassan bin Shahid

### 4<sup>th</sup> Semester

1. Mahnoor Adnan
2. Rameen Malik
3. Mannal Atif

### 9<sup>th</sup> Semester

1. Abdullah Irfan

### 7<sup>th</sup> Semester

1. Muhammad Naeem

### 5<sup>th</sup> Semester

1. Ayesha Amjad
2. Abeera Anwar
3. Rameen Muneer
4. Abdul Qadir

### 3<sup>rd</sup> Semester

1. Malaika Waqar

### 2<sup>nd</sup> Semester

1. Ayesha Rashid

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Foundation University School of Health Sciences  
Foundation University Islamabad, Pakistan

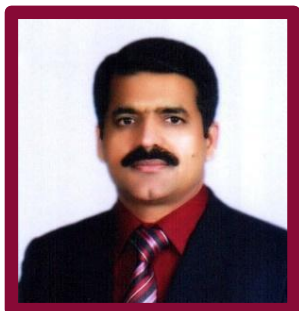


## **KEYNOTE SPEAKERS**

### **PROF. DR. ULFAT BASHIR**

**BDS, MCPS, FCPS, MHE**

Prof. Ulfat Bashir earned his BDS degree in 1994 from de'Montmorency College of Dentistry, Lahore (University of Punjab). He completed his MCPS in Orthodontics in 2000, followed by his FCPS in Orthodontics in 2002 from the College of Physicians & Surgeons, Pakistan. He also holds a Master's degree in Health Professional Education from Riphah University. Since 2013, he has been serving as the Principal of Islamic International Dental College, where he also heads the Department of Orthodontics. In recognition of his outstanding contributions to education, Prof. Dr. Ulfat Bashir was honored with the "Best Teacher Award 2013" by the Higher Education Commission (HEC). He has vast experience in the field of academics, curriculum development and hospital services. Under his leadership, Islamic International Dental College achieved a major milestone by implementing an integrated curriculum. He has produced a number of consultants in the field of Orthodontics. He has authored several national and international publications and is an active member of various professional and social societies. He has presented at numerous national and international conferences and currently serves as the Editor-in-Chief of the Pakistan Orthodontic Journal, President of the Pakistan Association of Orthodontists, and Vice President for the Federal Zone of the Pakistan Dental Association



### **PROF. DR. MUHAMMAD ALAMGIR KHAN**

**MBBS, FCPS, MCPS-HPE**

Brigadier Professor Muhammad Alamgir Khan, graduate of Army Medical College, has been teaching Physiology at his parent Institute for the last about 24 years. He is a qualified medical educationist having a vast experience of teaching and training to his credit. Apart from teaching Physiology, he is a lead facilitator for training workshops on research, data analysis and personal development. He has conducted about 250 workshops on these topics at various platforms including universities and colleges. He is an approved training workshop facilitator of College of Physicians and Surgeons, Pakistan. He was awarded the best university teacher award of 2021 by NUMS.



## PROF. DR. MUHAMMAD UMAR

**BSPT, PPDPT, MSPH, PhD Rehabilitation Sciences**

Dr. Muhammad Umar currently holds the position of Head of Physiotherapy and Director of Institute of Allied Health Sciences, Rawalpindi Medical University Rawalpindi. Additionally, he serves as the Vice Chair of Education at the University of Toronto, Canada, and the International Centre for Disability and Rehabilitation, Canada.



Dr. Muhammad Umar earned his Doctorate degree in Rehabilitation Sciences, specializing in Neurological Rehabilitation. His academic journey is further enriched by a Masters in Public Health, Post Professional Doctor of Physiotherapy, and numerous certifications in Sports Medicine, Manual Therapy, and Tele Rehabilitation Medicine. Beyond his roles as a reviewer and editor for prominent national and international journals, as well as Physiopedia, Dr. Umar is an author of several research papers published both nationally and internationally. He has also authored two handbooks for the medical community. Notably, in addition to his editorial contributions to various national journals, Dr. Umar holds the distinction of being the chief editor of the 1st Journal of Nursing & Allied Health Sciences at Rawalpindi Medical University, Rawalpindi.

## DR. KAINAT ASMAT

**PhD (Nursing), MSN (Gold Medalist)**

**MBA-HRM, M.Sc. Clin. Psychology**



Dr. Kainat Asmat is an accomplished academic and researcher with extensive experience in nursing education and administration. Her research focuses on chronic care management in adult and pediatric populations, with a special emphasis on self-management of chronic illnesses, patient- and family-centered care, and promoting mental health for family caregivers. Dr. Asmat has several publications in high-impact journals and has received first-place awards for various oral and poster paper presentations. She is an active member of editorial boards and a reviewer for several national and international research journals. With extensive experience in teaching research methodology at undergraduate, graduate, and postgraduate levels, Dr. Asmat has facilitated numerous research workshops and training across the country. She has also served as a speaker on research writing and publication ethics at various forums. In her current role at STMU, she chairs the Research Advisory Committee and is a member of the Institutional Review Board and Ethics Committee.

**4<sup>th</sup> YOUNG SCIENTISTS RESEARCH CONFERENCE**

**Foundation University School of Health Sciences (FUSH) 2024**

**CONFERENCE PROGRAM**

1<sup>st</sup> October, 2024

Timing: 0800 – 1500 hrs

<b>NO.</b>	<b>ACTIVITY</b>	<b>TIME</b>
1.	Reception Desk Open	0800-0830 hrs
2.	Seating in FUSH Auditorium	0830-0840 hrs
3.	Arrival of Chief Guest	0840-0845 hrs
4.	National Anthem	0845-0850 hrs
5.	Recitation of Holy Quran	0850-0855 hrs
6.	Welcome Note	0855-0900 hrs
7.	Introduction of Students Research Society	0900-0910 hrs
<b>PLENARY SESSION</b>		
8.	Keynote Speech (Rehab Sciences)	0910-0930 hrs
9.	Keynote Speech (Dental Sciences)	0930-0950 hrs
10.	Keynote Speaker (Medical Sciences)	0950-1010 hrs
11.	Keynote Speaker (Nursing Sciences)	1010-1030 hrs
12.	Remarks by Chief Guest and Shields Presentation	1030-1045 hrs
13.	Tea Break (Cafeteria for Faculty and Parking Sheds for Guest Students)	1045-1115 hrs
<b>PARALLEL SCIENTIFIC SESSIONS</b>		
14.	Scientific Sessions (Lecture Halls I, II, III, IV, V, Auditorium, Exam Hall 2, Physiology Tutorial Room 3rd Floor of FUMC building)	1115-1315 hrs
<b>POSTER SESSION</b>		
15.	Poster Presentations (Exam Hall 1, 5th Floor)	1215 hrs onwards
16.	Lunch Break (Cafeteria for Faculty and Parking Sheds for Guest Students)	1345-1415 hrs
<b>CLOSING SESSION</b>		
17.	Distribution of Awards for Best Presentations/Posters (Auditorium)	1415-1430 hrs
18.	Closing Remarks by Director FUSH	1430-1440 hrs
19.	Group Photograph of Organizers and Winners with Director FUSH	1445-1500 hrs

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**Foundation University School of Health Sciences (FUSH) 2024**

<b>PLENARY SESSION</b>	
<b>Moderators:</b> Presidents SRS <b>Venue:</b> Auditorium (FUSH)	
<b>ACTIVITIES</b>	<b>TIMING</b>
Welcome Note - Prof Dr. Sadia Ahsin	0855 – 0900 hrs
Introduction of Students Research Society- Presidents FUSH SRS	0900 – 0910 hrs
Prof. Muhammad Umer “Technology Shaping the Future of Medical Research”	0910 – 0930 hrs
Prof. Ulfat Bashir “AI in HealthCare”	0930 – 0950 hrs
Prof. Muhammad Alamgir “Study Designs”	0950 – 1010 hrs
Dr. Kainat Asmat “Research Ethics”	1010 – 1030 hrs
Address by Chief Guest	1030 – 1040 hrs
Souvenir and Shields Presentation	1040 – 1045 hrs
Refreshments College Cafeteria and Outdoor Stalls	1045 – 1115 hrs

**PARALLEL SCIENTIFIC SESSION - I (1115-1315 hrs)**

**Session Supervisor:** Dr. Bushra Rehman

**Student Moderators:** Omar Ashfaq Bhatti, Saad Iqbal Bhatti

**Venue:** Lecture Hall – I, First floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-1	Impact of Migraine on Quality of Life among Healthcare Workers and Students of Army Medical College: A Cross-Sectional Study	Menahil Fatima	1115-1125 hrs	1
2.	OP-2	Motivational Factors, Potential Barriers, Perceived Physiological and Psychological Effects of Blood Donation on Blood Donors of Islamabad	Ishwa Khan	1125-1135 hrs	3
3.	OP-3	An Analytical Cross-Sectional Study to Determine the Quality of Water and Frequency of Water-Borne Diseases in Suburban and Slum Areas of ICT	Amina Munir	1135-1145 hrs	4
4.	OP-4	Insights into Behavioral Challenges in ASD Children in Peshawar Autism Centers and Parental Perspectives on its Management: A Mixed Method Study	Malak Amanullah Khan	1145-1155 hrs	5
5.	OP-5	Fostering Digital Health in Pakistan: An Interventional Study Regarding Awareness of Telemedicine among Patients of Diverse Healthcare Setups in Islamabad	Elyzae Rizwan	1155-1205 hrs	6
6.	OP-6	Determining the Knowledge of MBBS Students Regarding Spread and Prevention of Monkeypox Virus	Syed Tahir Hussain	1205-1215 hrs	7
7.	OP-7	The Relationship Between Sleep Deprivation, Cognitive Function, and Academic Performance among Medical Students; A Cross-sectional Study	Ayesha Basharat	1215-1225 hrs	8
8.	OP-8	Assessment of Vaccination Hesitancy among Parents of Newborns Visiting Pediatrics Department of Fauji Foundation Hospital, Rawalpindi: A Cross-Sectional Study	Ayesha Nousheen Malik	1225-1235 hrs	9
9.	OP-9	In Search of A Better Tomorrow: Prevalence of Job Dissatisfaction and Turnover Intentions among Young Doctors	Arwaa Chaudhry	1235-1245 hrs	11
10.	OP-10	Effect of Vitamin D on Postoperative Atrial Fibrillation in Patients Who Underwent Coronary Artery Bypass Grafting: A Systematic Review and Updated Meta-Analysis	Hurmat Fatima Bhatti	1245-1255 hrs	13
11.	OP-11	From Traditional to Digital: Assessing Post-COVID-19 Cognitive Impairment with CogQuest in Islamabad and Rawalpindi	Noor Ul Ain Ansar	1255-1305 hrs	14

### PARALLEL SCIENTIFIC SESSION- II (1115-1315 hrs)

**Session Supervisor:** Dr. Ayesha Ali

**Student Moderators:** Malika Rasheed, Fatima Khalid

**Venue:** Lecture Hall – II, Second floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-12	Non- Rapid Eye Movement Parasomnias and Their Impact on Academic Performance in Medical University Students: A Cross-Sectional Study	Fatima Iftikhar	1115-1125 hrs	15
2.	OP-13	A Comparative Analysis of Dietary Habits and Nutritional Knowledge among Medical and Non-Medical Undergraduate Students of Islamabad and Rawalpindi: A Cross-Sectional Study	Muhammad Talha Farrukh	1125-1135 hrs	16
3.	OP-14	Prevalence and Factors Associated with Eating Disorders among Male Medical Students of a Private University- A Cross-Sectional Study	Hanzla Jameel	1135-1145 hrs	17
4.	OP-15	Home vs. Hostel: Investigating Mental Health Outcomes in Islamabad's First Year Medical Undergraduates Through A Cross-Sectional Approach	Haseeb Hassan	1145-1155 hrs	18
5.	OP-16	Impact of Sleep Quality on Academic Performance of Medical Students	Shahab Afridi	1155-1205 hrs	19
6.	OP-17	Lansoprazole Plus Levosulpiride Versus Esomeprazole In Participants with Gastroesophageal Reflux Disease and Erosive Esophagitis:A Double Blinded Randomized Control Trial	Faraz Hassan Ali Orakzai	1205-1215 hrs	20
7.	OP-18	Impact of Intermittent Fasting with Keto Diet on AMPK Levels in Breast Cancer Patients Receiving Chemotherapy	Ahsan Khan Lughmani	1215-1225 hrs	21
8.	OP-19	Knowledge and Practices of Safe Blood Transfusion Protocols among Nurses in Tertiary Care Hospitals of Twin Cities of Pakistan: A Cross-Sectional Study	Suleman Mehmood	1225-1235 hrs	22
9.	OP-20	Assessment of Knowledge and Awareness of Risk Factors and Warning Signs of Stroke among the Students of Foundation University School of Health Sciences	Syed Alyeez Raza Bokhari	1235-1245 hrs	24
10.	OP-21	Importance of Counseling Related to Anxiety and Stress in Major Elective Surgical Patients Quasi Experimental Study	Maryam Ijaz	1245-1255 hrs	25
11.	OP-22	Gastrointestinal Manifestations of Dengue Infection: A Cross-Sectional Study at Holy Family Hospital	Aiman Afkar Abbasi	1255-1305 hrs	26



**PARALLEL SCIENTIFIC SESSION- III (1115-1315 hrs)**

**Session Supervisor:** Dr. Javaria Sharafat

**Student Moderators:** Ehtisham Khan, Asad Ur Rab

**Venue:** Lecture Hall – III, Third Floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-23	Maternal and Neonatal Outcome in Women With and Without Threatened Abortion	Arfa Sohail Miraj	1115-1125 hrs	27
2.	OP-24	Awareness about Blood Donation among College Going Students of Islamabad- A Pre and Post Interventional Study	Aneela Maryam	1125-1135 hrs	28
3.	OP-25	Comparative Efficacy of Abbreviated Dual Antiplatelet Therapy Followed by P2Y12 Inhibitor Monotherapy versus Standard Dual Antiplatelet Therapy in ACS Patients Post-PCI: A Systematic Review and Meta-Analysis	Shabnum Ijaz	1135-1145 hrs	29
4.	OP-26	Awareness and Attitude Towards Breast Cancer and Mammography among Female Medical Students in Twin Cities of Pakistan: A Cross-Sectional Study	Mehroz Mustafa	1145-1155 hrs	30
5.	OP-27	Evaluation of Perception and Awareness of Asthma in the Patients Visiting OPD of Fauji Foundation Hospital Rawalpindi; A Cross- Sectional Study	Aleena Ahmed	1155-1205 hrs	31
6.	OP-28	Assessment of the Knowledge and Awareness of Breast Cancer and Attitude Towards Breast Self-Examination among Female Patients Visiting Gynaecology OPD of Fauji Foundation Hospital Rawalpindi	Maheen Nawaz	1205-1215 hrs	32
7.	OP-29	Exploring the Impact of Cationic Surfactant CTAB on Bleu Brilliant G 250 De Cosmassie: Implications for Health Management and Environmental Sustainability	Muhammad Hasnat Akhtar	1215-1225 hrs	33
8.	OP-30	The Evaluation of Early Prognostic Factors of Mortality in Patients with Acute Pancreatitis at Holy Family Hospital Rawalpindi; A Prospective Cohort Study	Faizan Shahzad	1225-1235 hrs	35
9.	OP-31	Effect of Sleep Quality on Physical, Mental, and Emotional Health of Students of Private Medical College; A Cross-sectional Study	Momina Zafar	1235-1245 hrs	36
10.	OP-32	Exploring Suicide Literacy and Help-Seeking Behaviors in Pakistani Undergraduates: A Cross-Sectional Study	Asad ur Rab	1245-1255 hrs	37
11.	OP-33	Cross Sectional Study on TB Awareness and Prevention in Allied Hospitals of Rawalpindi	Saira Azhar	1255-1305 hrs	38

### PARALLEL SCIENTIFIC SESSION- IV (1115-1315 hrs)

**Session Supervisor:** Dr. Wardah Mazhar

**Student Moderators:** Eesha Noor, Imaan Binte Faisal

**Venue:** Lecture Hall – IV, Fourth Floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-34	Efficacy and Outcomes of Bempedoic Acid versus Placebo in Hypercholesteremic Patients with Statin-Intolerance: A Systematic Review and Meta-analysis of Randomized Controlled Trials	Muhammad Daoud Tariq	1115-1125 hrs	39
2.	OP-35	Examining Correlates of Five Factor Model Personality Traits of Future Specialists and Their Specialty Preferences: A Cross-Sectional	Fizza Nouman	1125-1135 hrs	41
3.	OP-36	Beyond the Norm: Assessing Prostate Cancer Awareness and Screening Practices in Pakistani Men Aged 40 and Above with Affected First-Degree Relatives, Employed at a Private Organization	Sadia Tameez-uddin	1135-1145 hrs	43
4.	OP-37	Noise-Induced Hearing Loss in a Connected World: Exploring the Consequences of Earbud Dependency on Medical Students' Hearing	Rikza mubeen	1145-1155 hrs	45
5.	OP-38	Prevalence, Triggers, and Self-Medication Practices for Migraines and Tension-Type Headaches among Medical and Non-Medical Undergraduate Students: A Cross-Sectional Study	Anfaal Fatima	1155-1205 hrs	47
6.	OP-39	Knowledge and Perception of Patients Regarding Use of Artificial Intelligence in Healthcare: A Cross-Sectional Study	Fariha Sadia Nasir	1205-1215 hrs	48
7.	OP-40	Role of Nicorandil in Preventing Contrast-Induced Nephropathy in Patients Undergoing Cardiac Catheterization Procedures: An Updated Systematic Review and Meta-Analysis of Randomized Controlled Trials	Ahmed Ali Khan	1215-1225 hrs	49
8.	OP-41	Comparison of Fear of Failure among Medical vs Non-Medical Students	Arooj Basit	1225-1235 hrs	50
9.	OP-42	A Comparative Analysis of Study Habits and Techniques among Medical and Dental Students of WMDC	Daim Idrees	1235-1245 hrs	51
10.	OP-43	Assessment of Mortality Trends Related to Postoperative Respiratory Disorders in the US from 1999 to 2020 Using CDC WONDER Database	Danish Ali Ashraf	1245-1255 hrs	52
11.	OP-44	Association between Maternal Antipsychotic Use During Pregnancy and Neurodevelopmental Disorders in the Neonate: A Systematic Review and Meta-Analysis	Farooq Kamran	1255-1305 hrs	53

**PARALLEL SCIENTIFIC SESSION- V (1115-1315 hrs)**

**Session Supervisor:** Dr. Hajra Siddique

**Student Moderators:** Mahnoor Khan, Noorbakht Fatima

**Venue:** Lecture Hall – V, Fifth Floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-45	Use of Statins in Reducing the Risk of Anthracycline Induced Cardiotoxicity; A Systematic Review and Meta-Analysis	Danish Ali Ashraf	1115-1125 hrs	54
2.	OP-46	Cyberchondria and its Association with Smartphone Addiction: A Cross-Sectional Study among Undergraduate Medical Students of Twin Cities, Pakistan	Fatima tul Zahra	1125-1135 hrs	55
3.	OP-47	Long Term Clinical Outcomes of Intravascular-Imaging Guided PCI versus Angiography-Guided PCI in Complex Coronary Lesions: A Systematic Review and Meta-Analysis	Danish Ali Ashraf	1135-1145 hrs	56
4.	OP-48	Comparative Study of Attitudes and Perceptions Towards Research among Students In MBBS, DPT, BDS, and Nursing at Foundation University School of Health Sciences (FUSH)	Muhammad Nouman	1145-1155 hrs	57
5.	OP-49	Sleep Quality and Perceived Stress Levels among Medical Practitioners of A Tertiary Care Hospital in Rawalpindi: A Cross Sectional Study	Noor-e-Kainaat	1155-1205 hrs	58
6.	OP-50	The Impact of Sleeplessness on Memory and Academic Performance in College Students: A Cross- Sectional Study	Muhammad Azhar Shafi	1205-1215 hrs	59
7.	OP-51	Evolving Quality of Life in Medical Education: Across Five Years	Aamna Akhtar	1215-1225 hrs	60
8.	OP-52	Exploring the Impact of Alexithymia and Emotional Well-being on Academic Self-efficacy of Medical Students: A Cross-Sectional Study	Aamna Imran	1225-1235 hrs	61
9.	OP-53	The Relationship between Personality Traits, Emotional Intelligence and Decision-Making Styles among Medical Students of Pakistan: A Cross-Sectional Study	Maryam Abdul Moeed	1235-1245 hrs	62
10.	OP-54	Prevalence, Risk Factors and Awareness Regarding the Use and Associated Pathology of e-cigarettes in Pakistan	Muhammad Huzaifah Qureshi	1245-1255 hrs	64
11.	OP-55	Assessing AI Literacy in Medical Education: Understanding Medical Students' Knowledge and Attitudes	Malaika Nasir	1255-1305 hrs	65

**PARALLEL SCIENTIFIC SESSION- VI (1115-1315 hrs)**

**Session Supervisor:** Dr. Nasar Abbas Shamsi

**Student Moderators:** Abdullah Asif, Mustafa Hamid Khan

**Venue:** Tutorial Room – III, Third Floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-56	Perceptions, Awareness, and Risk Assessment of Dyslexia: A Survey-Based Study	Elsa Siddiqui	1115-1125 hrs	66
2.	OP-57	Effect of Bevacizumab Combined with Irradiation vs Bevacizumab alone on Survival of Patients with Recurrent Glioblastoma- A Systematic Review and Meta-Analysis	Beenish Sabir	1125-1135 hrs	67
3.	OP-58	Adherence to Drug Therapy for GERD	Suhaib Siddiqui	1135-1145 hrs	68
4.	OP-59	Assessment and Knowledge of Risks and Prevention of Consanguineous Marriage among Medical Students of Foundation University of Health Sciences, Islamabad: A Cross-Sectional Study	Maryam Tanveer	1145-1155 hrs	69
5.	OP-60	Analysis of Over-the-Counter Painkiller Knowledge, Use and Awareness among Medical Students	Asadullah khan	1155-1205 hrs	70
6.	OP-61	Seven Years of Struggle: Tracking the Evolution of Antimicrobial Resistance in Acinetobacter Baumannii	Arfa Zafar	1205-1215 hrs	71
7.	OP-62	The Changing Face of MRSA: Antimicrobial Resistance Trends Over 7 Years	Abdul Toheed Khalid	1215-1225 hrs	72
8.	OP-63	Imposter Syndrome and its Association with Atychiphobia among Medical Students	Zenab Younas	1225-1235 hrs	73
9.	OP-64	Personal Hygiene Status and Prevalence of Skin and GIT Diseases in Orphanages of Twin Cities: A Quasi Experimental Study	Ali Ahmad Khan	1235-1245 hrs	74
10.	OP-65	Efficacy and Safety of Distal Radial Artery versus Proximal Radial Artery in Cardiac Procedures: A Systematic Review and Meta-analysis	Hafza Arshad Azam Raja	1245-1255 hrs	75
11.	OP-66	Trends in Pancreatic Cancer Related Mortality; A Retrospective Analysis using CDC WONDER Database	Kanz-ul-eeman Maryam	1255-1305 hrs	76

**PARALLEL SCIENTIFIC SESSION- VII (1115-1315 hrs)**

**Session Supervisor:** Dr. Fizza Sahar Anwar

**Student Moderators:** Tooba Khan, Zainab Tariq

**Venue:** Auditorium, FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-67	Perception of Vapor Products & its Impact on General Health among Healthcare and Non-Healthcare Students	Mahnoor Dawood	1115-1125 hrs	77
2.	OP-68	Gauging Support and Opposition: Public Views on Sex Education in Pakistan	Rameen Kamran	1125-1135 hrs	78
3.	OP-69	Managing Special Needs Patients: A Graduate Perspective on the Inclusivity of Dental School Curricula	Anoosha Usman	1135-1145 hrs	79
4.	OP-70	Are Lower Middle Income Countries (LMICs) Prepared to Embrace Advanced Nanotechnology in Dentistry? Assessment of Knowledge and Intentions to Use Nano-materials of Dental Clinicians in Pakistan	Muhammad Khubaib	1145-1155 hrs	80
5.	OP-71	The Role of AI in Dental Education in Developing Countries: A Cross-Sectional Study	Shamayam Mustaf	1155-1205 hrs	82
6.	OP-72	Optimizing Dental Clinics: A Survey-Based Approach and Practical Advice	Maryam Ilyas	1205-1215 hrs	83
7.	OP-73	Cardiorespiratory Fitness and Agility Levels among Club Cricketers of Rawalpindi and Islamabad	Muhammad Shafay Ali	1215-1225 hrs	84
8.	OP-74	Normative Values of Vibration Perception Threshold using Neurothesiometer among Healthy Adults and its Comparison with Patients of Trigeminal Neuralgia	Mayya Firdous	1225-1235 hrs	85
9.	OP-75	Frequency of Menopausal Symptoms and Levels of Physical Activity in Menopausal Females	Laiba Faran	1235-1245 hrs	87
10.	OP-76	Academic Transitional Issues of Adolescents with Autism Spectrum Disorders: A Qualitative Inquiry	Saleha Bibi	1245-1255 hrs	88
11.	OP-77	Comparing the Diagnostic Accuracy and Management Plan of Clinical Psychologists and Large Language Models in Terms of Mental Health Disorders	Shahab Afridi	1255-1305 hrs	89



**PARALLEL SCIENTIFIC SESSION- VIII (1115-1315 hrs)**

**Session Supervisor:** Dr. Saman Shaukat

**Student Moderators:** Rafia Khawar, Maida Nasir Khan

**Venue:** Exam Hall 2, Fifth Floor FUMC

*Click on presentation title to scroll to abstract page*

Sr No	OP#	Paper Title	Presenter:	Timing	Page No
1.	OP-78	Assessment of Awareness, Attitude, Knowledge, and Application Towards Dental Ergonomics and Musculoskeletal Disorders among Dental Students in Rawalpindi	Sameen Shakeel	1115-1125 hrs	91
2.	OP-79	Can Artificial Intelligence-Driven Detection of Interproximal Bone Loss in Anterior Teeth Surpass Human Accuracy? A Panoramic Study Using Advanced Radiographic Analysis	Moeza Awan	1125-1135 hrs	92
3.	OP-80	Spectrum of Antifungal Drug Resistance in Candida Species Isolates in Pakistan in the Last Decade (2014-2024)	Zainab Asim Butt	1135-1145 hrs	94
4.	OP-81	Anthropometric Insights: Comparing Hand and Facial Measurements for Occlusal Vertical Dimension (OVD) Assessment	Zuhayr Arif Jabbar Khan	1145-1155 hrs	95
5.	OP-82	Occurrence of Myofascial Trigger Points in Quadratus Lumborum and Erector Spinae Muscles in Females with Dysmenorrhea	Esha Zia	1155-1205 hrs	96
6.	OP-83	Comparison of Core Endurance Between Individuals with and Without Lower Crossed Syndrome	Areeka Riasat	1205-1215 hrs	97
7.	OP-84	Fall Risk among Persons with Type II Diabetes Mellitus as Compared to Healthy Controls	Zaha Asif	1215-1225 hrs	98
8.	OP-85	Frequency of Lateral Epicondylitis in the Housewives of Rawalpindi and Islamabad	Seher-e-Konain	1225-1235 hrs	99
9.	OP-86	Knowledge and Perception of Breastfeeding among University Students of Twin Cities: Cross-Sectional Study	Manahel Azhar	1235-1245 hrs	100
10.	OP-87	Prevalence of Dry Socket In Diabetic Patients	Muhammad Nawfal Sahi	1245-1255 hrs	101
11.	OP-88	The Relation between Personality Traits and Academic Success: A Correlation Study on the Dental Students at FUCD	Sabahat Shafique	1255-1305 hrs	102

### POSTER PRESENTATION SESSION (1215 – 1345 hrs)

**Session supervisor:** Dr. Jawwad Anis Khan, Dr. Tayyeba Iftikhar, Dr. Ammara Abid

**Student Moderators:** Asher Tariq, Mahnoor Adnan, Ayesha Arif

**Venue:** Exam Hall 1, Fifth Floor FUMC

Sr No	Poster number	Author's Name	Institute	Abstract Title
1.	PM-1	Aleeza Safeer	Army Medical College	Ensuring the Adherence to Personal Protective Equipment Utilization among the Sanitary Personnel in PEMH/CMH Rawalpindi: A Analytical Cross Sectional Study
2.	PM-2	Asim Mehmood	Shifa College of Medicine	First Reported Case of Retroperitoneal Small Cell Carcinoma from Pakistan
3.	PM-3	Aban Masaud Mian	Khyber Medical College	A Challenging Diagnosis of Huntington's Disease: Case Report
4.	PM-4	Abdul Sami	NUST School of Health Sciences	Evaluating AI as a Tool of Learning : Insights from a Cross-Sectional Study among Medical Students
5.	PM-5	Shahira Suman	Islamic International Medical College	Disconnected in a Connected World - Understanding Nomophobia and its Coping Styles in Medical Students - A Cross Sectional Study
6.	PM-7	Tahrim Saqib	Foundation University Medical College	A Retrospective Study of Acute Appendicitis-Related Mortality among Older Adults in the United States: Regional and Demographic Patterns from 1999 to 2020
7.	PM-8	Wania Khalid	Foundation University Medical College	Assessment of Knowledge and Practices of Foot Care among Diabetics and its Association with Socioeconomic Status; A Cross-Sectional Study in Twin Cities of Pakistan
8.	PM-9	Noor ul Ain Shah	National University of Medical Sciences	Excessive Video Gaming and its Correlation with Sleep Quality and Aggression among University Students of Twin Cities of Pakistan
9.	PM-10	M. Hashir Ishaq	NUST School of Health Sciences	The Direction of Telemedicine among Common People In Pakistan: Positive or Negative Perceptions and Impact – A Systematic Review
10.	PM-11	Areeba Ahsan	Royal Brompton Hospital	Clinical Outcomes with Cardiac Resynchronization Therapy In Patients with Cardiac Sarcoidosis: A Systematic Review and Proportional Meta-Analysis
11.	PM-12	Amna Fakhar	Foundation University Medical College	Assessing the Impact of Academic Stress on Tension-Type Headaches among Medical Students: Triggers, Remedies, and Frequency
12.	PM-13	Areej Fatima	Foundation University Medical College	Knowledge, Attitude and Practices Regarding Needle Stick Injuries among Medical Students
13.	PM-14	Rayyan Mohammad Makki Bakhsh	Foundation University Medical College	Experiences and Beliefs Related to Sleep Paralysis among the General Population of the Twin Cities: A Cross-Sectional Study
14.	PM-15	Zoya Almas	Fatima Jinnah Medical University	A Study on Childhood Vaccination Status: Understanding the Patterns and Barriers to Immunization in Pakistan
15.	PM-16	Aban Masaud Mian	Khyber Medical College	A Comparative Analysis of Traditional Classroom Learning vs Online Learning Resources among Medical Students of Khyber Pakhtunkhwa, Pakistan
16.	PM-17	Areeba Qudrat	Shifa College of Medicine	Enhancing Awareness and Prevention of Traumatic Brain Injuries among Cricket-Playing Youth In Islamabad: A Study on Knowledge Gaps and Educational Interventions
17.	PM-18	Benish Sabir	Rawalpindi Medical University	Suprapatellar Synovial Hemangioma; A Unique Case Report of an 18-Year-Old

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Sr No	Poster number	Author's Name	Institute	Abstract Title
18.	PM-19	Rayyan Nabi	Dow University of Health Sciences	Telemedical Strategies for the Improvement of Secondary Prevention in Patients with Cerebrovascular Events: An Updated Systematic Review and Meta-Analysis
19.	PM-20	Abdullah Ali	Shifa College of Medicine	Comparison of Long-Term Outcomes between Surgical and Endovascular Revascularization in Chronic Limb-Threatening Ischemia
20.	PM-22	Hafsa Arshad Azam Raja	Rawalpindi Medical University	Study of Anthropometric Parameters of Adult Human Femur of Pakistani Population
21.	PM-23	Aisha Habib Ahmed	Islamic International Medical College	Human vs AI: A Comparative Study of Lifestyle Coaching on Medical Students Well-Being
22.	PM-24	Shahab Afridi, Sarmad Nazir	Ayub Medical College	Prevalence, Pattern and Mainspring for Self-Medication: A Community Based Cross-Sectional Study as a Step Towards a Much-Refined Health Care
23.	PM-25	Diya Anwar	Ayub Medical College	Descriptive Analysis of Youtube Videos as a Source of Information on ADHA
24.	PM-26	Abeeha Zia	Fazaia Medical College	Risk Stratification, Quality of Life and Depression in Patients of Benign Prostatic Hyperplasia/Prostate Carcinoma: A Cross-Sectional Study
25.	PM-27	Laveeza Syeda	Islamic International Medical College	Knowledge and Perception of Artificial Intelligence among Undergraduate Students of Medical, Pharmaceutical, and Allied Health Sciences at Riphah International University
26.	PM-28	Kashaf Noor Ali	Foundation University Medical College	Examining Food Handling Knowledge, Hygiene Practices, and Foodborne Illness Rates among Medical College Hostel Residents: A Cross-Sectional Study
27.	PM-29	Marwah Bintay Khalid	Rawalpindi Medical University	Safety and Efficacy of Desmopressin (DDAVP) in Preventing Hematoma Expansion in Intracranial Hemorrhage Associated with Antiplatelet Drugs Use: A Systematic Review and Meta-Analysis
28.	PM-30	Areej Alvi	Shifa College of Medicine	Systemic Lupus Erythematosus, Lupus Nephritis, and Listeria Monocytogenes Infection During Pregnancy: Insights from a Case Report on Maternal and Fetal Outcomes
29.	PM-31	Aqsa Ejaz	-	Frequency and Association of Nomophobia and Internet Addiction with Physical Activity, Attention, Memory and Sleep In E-Gamers
30.	PM-32	Areesha Abid	Rawalpindi Medical University	Comparing the Efficacy of Platelet Rich Plasma vs Topical Minoxidil in Patients of Androgenetic Alopecia: A Systematic Review of Clinical Trials
31.	PM-33	Faizan Fazal	Rawalpindi Medical University	The Effect of Adding Radiotherapy to Androgen Deprivation Therapy in Men with Node-Positive Prostate Cancer after Radical Prostatectomy: A Systematic Review and Meta-Analysis
32.	PM-35	Asim Mehmood	Shifa College of Medicine	DGAT1 Mutation Associated with Congenital Diarrhea in a Pediatric Patient
33.	PM-36	Amal Shahzad Khan	Foundation University Medical College	Comparative Efficacy of Endocuff-Assisted versus Standard Colonoscopy to Improve Adenoma Detection: An Updated Systematic Review and Meta-Analysis
34.	PM-37	Aymen Mehfooz	Foundation University Medical College	Values And Attitude of Healthcare - Professionals Towards Legal and Religious Aspects of Induced Abortion
35.	PM-38	Alina Zanub	Foundation University Medical College	Are They Prepared? Assessment of Knowledge and Attitude Regarding BLS in Undergraduate Medical Students of a Private Medical College in Rawalpindi: A Cross-Sectional Study

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36.	PM-39	Saleha Noor	Foundation University Medical College	Oral Cancer Awareness, Attitude and Barriers among Young Generation: A Cross-Sectional Study
37.	PM-40	Rayyan Mohammad Makki Bakhsh	Foundation University Medical College	Exploring Vaping Behaviors, Self-Reported Respiratory Health, and Cessation Strategies among Medical Students: A Cross-Sectional Study
38.	PM-41	Muhammad Saad Iqbal	Foundation University Medical College	Telogen Effluvium: A Curious Case Mimicking Male Androgenic Alopecia - A Case Report
39.	PM-42	Omar Farooq	Al Nafees Medical College	Knowledge and Perceptions of Factors Affecting Road Traffic Accidents among Medical Students of Islamabad: A Cross-Sectional Study
40.	PM-43	Waniya shahid	NUST School of Health Sciences	Impact of Academic Competition on Medical Students
41.	PM-44	Aneeqa Areej	Foundation University Medical College	Assessment of Awareness and Knowledge of Probiotics as a Novel Treatment Strategy in Treating Liver Diseases among Physicians of Rawalpindi
42.	PM-45	Muhammad Moaz Ali	Foundation University Medical College	Bacteriological Profile and Antibiogram of Post-Operative Complications among Diabetic and Non-Diabetic Patients of Various Wards in a Tertiary Care Hospital
43.	PM-46	Areeba Ikhlaiq	Foundation University Medical College	Knowledge and Perceptions of Healthcare Professionals Regarding Synbiotics
44.	PM-47	Haider Imran	Foundation University Medical College	Trends in Tuberculosis - Related Mortality in United States from 1999-2020 According to Race, Gender, Ethnicity, and Geographic Region
45.	PM-48	Faizan Shahzad	Rawalpindi Medical University	Safety and Efficacy of Adjunctive Lacosamide for Partial-Onset Seizures: A Systematic Review and Meta-Analysis
46.	PM-49	Haider Imran	Foundation University Medical College	Colchicine in Patients with Coronary Artery Disease: An Updated-Meta Analysis
47.	PM-50	Maham Tahir	Foundation University Medical College	Trends in Schizophrenia-related Mortality from 1999-2020 According to Year, Gender and Ethnicity Region
48.	PM-51	Hurmat Fatima	Foundation University Medical College	Beyond Treatment: The Strategy of Non-Intervention in Choroidal Hemangioma Presenter:
49.	PM-52	Tanveer Qazi	Foundation University Medical College	An Assessment of the Knowledge, Attitude and Practices Related to Breast-Feeding among Mothers Visiting the Paediatric and Gynaecology OPDs of Fauji Foundation Hospital, Rawalpindi
50.	PM-53	Huzaifa Qasim	Foundation University Medical College	Understanding Impostor Syndrome in Medical Students: A Cross-Sectional Study on Prevalence, Contributing Factors, and Intensity Across Academic Years at Foundation University
51.	PM-54	Talha Bashir	Services Institute of Medical Sciences	Effect of Screen Time on Psychosocial Skills of Children in Pediatric Department of Services Hospital, Lahore
52.	PM-55	Osama Ali	Watim Medical and Dental College	Gender Differences in Emotional Intelligence among Medical Students
53.	PM-56	Murtaza Akif	Foundation University Medical College	Unlocking Potentials: Exploring Awareness, Utilization, and Perceptions Related to Benefits and Challenges of Artificial Intelligence in Research – A Survey amongst Aspiring Healthcare Professionals of Islamabad
54.	PM-57	Tehreem Rauf	Fatima Jinnah Medical University	A Study of Neuroplasticity Mediators: Meditation, Aerobic Exercise, and Cognitive Training on Cardiovascular Health

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55.	PM-58	Syeda Aleena Hassan	Fatima Jinnah Medical University	An Overview of Factors that Predispose an Individual to PTSD
56.	PM-59	Lyba Rasheed	Foundation University Medical College	Examining the Role of Antibiotic Resistance Knowledge on the Attitudes and Practices of Antibiotic Usage among Medical Students of Islamabad and Rawalpindi
57.	PM-60	Owais Mazhar	Foundation University Medical College	Staphylococcus Aureus's Evolution of Resistance Against Antimicrobials: Trend over the Past Five Years
58.	PM-61	Aleena Fatima Sheikh	Fazaia Medical College	Stigmatization & Discrimination as Predictors of Self-Esteem among People Living With HIV/AIDS In Islamabad
59.	PM-62	Manahel Zulfiqar	Fatima Jinnah Medical University	Circadian Rhythms and Neurological Disorders
60.	PM-63	Malaika Manzoo	Fazaia Medical College	Empowering Surgical Patients: The Impact of Counseling On Anxiety and Stress Management
61.	PM-65	Hadiqa Qaisar	HBS Medical College	Stress among Medical Students in Pakistan: A Cross-Sectional Study Exploring Prevalence and Impact
62.	PM-66	Ehtisham Ali	Foundation University Medical College	Potential Barriers and Facilitators of Polio Vaccination among Parents at a Tertiary Care Hospital of Rawalpindi. A Cross-Sectional Study
63.	PM-67	Azeem Ashar Zaheer	Watim Medical and Dental College	Perceptions and Barriers Faced by Medical Students for Going Abroad for Training
64.	PM-68	Aamurzsh Nawaz	Watim Medical and Dental College	Sleep Hygiene Practice and its Impact on Mental Health among Students of Watim Medical & Dental College
65.	PM-69	Eeshal Fatima	Services Institute of Medical Sciences	Efficacy and Safety of Ensifentrine, a Novel Phosphodiesterase 3 and 4 Inhibitor, in Chronic Obstructive Pulmonary Disease: A Systematic Review and Meta-Analysis
66.	PM-70	Danish Ali Ashraf	Foundation University Medical College	Outcomes of Percutaneous Coronary Intervention in Acute Myocardial Infarction Patients with Chronic Kidney Disease: Insights from the National Inpatient Sample
67.	PM-71	Hafza Zafar	Watim Medical and Dental College	Impact of Caffeine Consumption On Academic Performance
68.	PM-72	Danish Ali Ashraf	Foundation University Medical College	Pulmonary Vein Isolation versus Posterior Wall Isolation in Adjunction with Pulmonary Vein Isolation in Treatment of Paroxysmal Atrial Fibrillation
69.	PM-73	Danish Ali Ashraf	Foundation University Medical College	Empagliflozin's Role in Post-Myocardial Infarction Management: A Systematic Review and Meta-Analysis
70.	PM-75	Sadia Khan	Watim Medical and Dental College	Elderly Experiences after Temporary Internet Disruption in Twin Cities of Pakistan
71.	PM-76	Hana Amir	Islamabad Medical and Dental College	Physical Impacts of Heeled vs. Flat Shoes on Women Working In Healthcare
72.	PM-77	Asher Tariq	Foundation University Medical College	Safety And Efficacy of Sotatercept in Treating Pulmonary Arterial Hypertension: A Systematic Review
73.	PM-78	Asher Tariq	Foundation University Medical College	Prevalence of Primary Dysmenorrhea in Young Females and How it Affects Daily Activities in Medical Students
74.	PM-79	Anoosha Adnan	Rawalpindi Medical University	Awareness of Mothers Coming to Obstetric Wards of Allied Hospitals Regarding Neonatal Care and the Working of Community Health Workers in their Districts



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76.	PM-81	Haris Mumtaz Malik	Rawalpindi Medical University	Busulfan versus Treosulfan Conditioning for Acute Myeloid Leukemia and Myelodysplastic Syndrome Undergoing Hematopoietic Stem Cell Transplantation: A Systematic Review and Meta-Analysis
77.	PM-82	Hajra Shabbir	Rawalpindi Medical University	Locus of Control, Self-Efficacy And Adherence In Hemodialysis Patients: A Cross-Sectional Study
78.	PM-83	Nimra Tanveer	Fatima Jinnah Medical University	Stem Cell Therapy: Neurodegeneration Reversed by Neuroregeneration
79.	PM-84	Ahlam Saleem Koul	Rawalpindi Medical University	The Effect of Ramadan Fasting on Cognition in Young Adults
80.	PM-85	Farooq Kamran	Foundation University Medical College	Endocarditis Caused by Neisseria Elongata: A Systematic Review
81.	PM-86	Beenish Sabir	Rawalpindi Medical University	Safety and Efficacy of Cangrelor in Endovascular Treatment of Intracranial Aneurysms: A Systematic Review
82.	PM-87	Eman Khalid	Mohtarma Benazir Bhutto Medical College	Diabetes Type 2 and Socioeconomic Status: A Study of Pakistan's Population
83.	PM-88	Waqar Ahmed	Watim Medical and Dental College	Rising Cancer Due to Uranium Radioactivity
84.	PM-89	Haider Imran	Foundation University Medical College	First Reported Case of Lentiglobus in Pakistan: Treatment Dilemma and Management Challenges
85.	PM-90	Humna Abid	Watim Medical and Dental College	Pain in The Pursuit of Knowledge: Dysmenorrhea in Medical vs Non-Medical Students
86.	PM-91	Muhammad Mohid Abdullah Chaudhry	Watim Medical and Dental College	Influence of Nicotine Consumption on Academic Performance of Medical Students
87.	PM-93	Mahrose Nawaz	Foundation University Medical College	Understanding Maternal Influence: Exploring Perceptions and Dynamics in Mother-Daughter Relationships
88.	PM-94	Ayesha Azhar	Islamic International Medical College	Interplay of AI in Healthcare: Attitudes and Knowledge Shaping Future Specialty Choice, A Cross Sectional Study.
89.	PM-95	Ali Abdul Basit	Rawalpindi Medical University	Factors Affecting Healthy Lifestyle among Medical Students in Rawalpindi Medical University, A Cross Sectional Study
90.	PM-96	Muhammad Usman	Rawalpindi Medical University	Association of Blood Clotting Time with Gender and Blood Group
91.	PM-97	Mahnoor Fayyaz	Foundation University Medical College	Assessment of Perception and Awareness of Medical Students Regarding Climate Change and its Effect on Quality of Life: A Cross Sectional Study
92.	PM-98	Imaan Bint-E-Faisal	Foundation University Medical College	Prevalence of GERD and Its Correlation with Factors (Sleep, Appetite, Drugs) among Undergraduate Medical Students of FUSH: A Cross-Sectional Study
93.	PM-99	Zain Abbas	Watim Medical and Dental College	Impact of Sleep and Stress Levels on Body Mass Index (BMI)
94.	PM-100	Muneeb Ur Rehman	Watim Medical and Dental College	Nutrition and Its Effect on Academic Performance, Stress Level and Sleep
95.	PM-101	Zahra Umar	Watim Medical and Dental College	Evaluation of Awareness: Breast Cancer Awareness in Non-Medical Students of Islamabad

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Sr No	Poster number	Author's Name	Institute	Abstract Title
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97.	PM-103	Fatima Sarwar	Watim Medical and Dental College	Impact of Social Media on Adults Psychology
98.	PD-2	Riwa Amjad Cheema	Hitec-IMS Dental College	Prevalence and Correlation of Caries with Specific Factors In Different age Groups in Taxila
99.	PD-3	Arooj Aslam	Foundation University College of Dentistry	Social Appearance Anxiety and Self-Esteem in Relation to Adult Dental Patients Undergoing Periodontal Therapy
100.	PD-4	Aimen Naveed	Foundation University College of Dentistry	Mindset Matters: Examining the Psychological Aspects of Orthodontic Treatment in Adults with Diverse Motivations
101.	PD-5	Muhammad Waleed Imtiaz	Foundation University College of Dentistry	Prevalence of Different Types of Oral Lichen Planus at a Tertiary Care Hospital
102.	PD-6	Hoor Fatima Butt	RIPHAH International University	Methodological Rigor in Observational Studies on The Association Between Temporomandibular Disorders and Headaches: A Review of Recent Findings
103.	PD-7	Afeefa Asim	Islamic International Dental Hospital	Barriers and Facilitators to AI Adoption in Dental Practices in Low-and Middle-Income Countries (LMIC)
104.	PD-8	Muhammad Bilal Mansoor	Foundation University College of Dentistry	Diabetic Patient Knowledge, Attitude and Practice Towards oral Health
105.	PD-9	Fatima Salman	Foundation University College of Dentistry	Digital Impression Scanner Awareness and Perception among Dentists Survey
106.	PD-10	Khudija Binte Nawaz	Foundation University College of Dentistry	Tele-dentistry: Building a Bridge between Patient Care and Technology
107.	PD-11	Parihan Khattak	Islamic International Dental College	Assessment of the Relationship Between Body Mass Index (BMI) And Oral Health Status In Pakistan - A Quantitative Study
108.	PD-12	Mahveen Manzoor	Foundation University College of Dentistry	3D Printing Awareness and Perception among Dentists Survey
109.	PR-1	Azka Fakhar	Foundation University College of Physical Therapy	Physical Activity Levels among Middle Aged Adults in Rawalpindi And Islamabad
110.	PR-2	Neha Jamshaid	Foundation University College of Physical Therapy	Exploring the Relationship between Burnout and Academic Performance among Pre-Clinical and Clinical Year Physical Therapy Students
111.	PR-3	Arouj Kiani	Foundation University College of Physical Therapy	Comparison of Spatio-Temporal Gait Parameters in Diabetics with and Without Neuropathy
112.	PR-4	Mayya Firdous	Foundation University College of Physical Therapy	Practice of Teaching Methodologies among Physiotherapy Students of Different Physiotherapy Colleges of Rawalpindi and Islamabad
113.	PA-1	Saleha Bibi	Fatima Jinnah Women University	Transition-Related Emotional and Behavioral Issues among Adolescents with Autism Spectrum Disorders: A Qualitative Inquiry
114.	PA-2	Maryyam Nisar	National University of Medical Sciences	Association of Dietary Behaviors with Academic Performance among School Going Children Aged 9-12 Years: A Cross-Sectional Study

OP 1

## IMPACT OF MIGRAINE ON QUALITY OF LIFE AMONG HEALTHCARE WORKERS AND STUDENTS OF ARMY MEDICAL COLLEGE: A CROSS SECTIONAL STUDY

**Presenter:** Menahil Fatima

**Authors:** Aqsa Safdar, Amna Maniha

**Affiliation:** Army Medical College

**BACKGROUND:** Migraine is a type of headache characterized by recurrent attacks of moderate to severe throbbing and pulsating pain on one side of the head. Quality of life refers to overall well-being and satisfaction experienced by an individual or a group of people in various aspects of life including physical, social, mental, and emotional dimensions. According to research, migraine has a negative impact on quality of life with reduced productivity, emotional distress, limitations in social interactions, and restrictions in leisure activities.

**OBJECTIVES:** To determine the impact of migraine on quality of life among healthcare workers and students of Army Medical College and to find the association between quality of life and various sociodemographic variables.

**METHOD:** An analytical cross-sectional study was conducted among medical students of Army Medical College, Residents, House officers, and Nursing officers of Pak Emirates Military Hospital (PEMH). Sample size of 323 was calculated using WHO calculator, keeping a confidence level of 95% and a margin of error of 5%. After getting informed consent from participants, a three part questionnaire was distributed via google forms, the first part being on demographic data, second part on diagnosis of migraine based on ID Migraine test, and third part on assessment of quality of life (QOL). The ID migraine test consisted of 3 questions regarding problems related to migraine over the past three months. For quality of life, we used the validated Migraine specific questionnaire (MSQ2.1), consisting of 14 questions assessing the impact of migraine on daily functions across three domains: restrictive role, preventive role, and emotional function. The data was collected and analyzed using IBM SPSS version 27. Descriptive analysis was done using frequencies and percentages. ANOVA and independent sample t tests were applied, P value of 0.05 was considered statistically significant.

**RESULTS:** Out of 323 participants, 18 having chronic illnesses were excluded. From the remaining 305 participants, 179 were confirmed to have migraines in the past three months using an ID migraine test. Remaining 126 participants did not have migraines. Migraine was found to be more common among young people aged 20-<30 (64.2%), married (52.5%) and in students (45.3%). The mean quality of life scores for restrictive, preventive and emotional domains were 56.49, 62.51, and 58.55 respectively. Moreover, a

strong association exists between QOL scores and age, gender, marital status and working status of a person (P- value <0.05).

**CONCLUSION:** The study established that there is a significant inverse effect of migraine associated headache on healthcare workers in all aspects of life. Thus, clinicians should routinely evaluate disability related to migraine and QOL as a complementary approach to migraine patients to ensure that they are receiving proper treatment and whether or not additional strategies are needed.

**KEY WORDS:** Migraine, quality of life (QOL), ID migraine test, migraine specific questionnaire

**MOTIVATIONAL FACTORS, POTENTIAL BARRIERS, PERCEIVED  
PHYSIOLOGICAL AND PSYCHOLOGICAL EFFECTS OF BLOOD DONATION ON  
BLOOD DONORS OF ISLAMABAD**

**Presenter:** Ishwa Khan

**Authors:** Ishwa, Bisma Iram

**Affiliation:** Fazaia Medical College

**BACKGROUND:** Human body needs 5L of circulating blood to perform its normal function. In case of any disturbance to its normal amount, blood is transfused from donors to recipients. In Pakistan, there is a large number of recipients but due to many misconceptions donors are far less.

**OBJECTIVES:** The aim of our study was to highlight all aspects of blood donation experience, and to negate all the myths in our society that stop people from donating blood. The objectives included determination of motivational factors, potential barriers, and physiological, psychological and adverse effects after donating blood, and association between these variables.

**METHODOLOGY:** In methodology, we visited blood banks of PAF hospital unit 1 and 2 and PIMS, took interviews of donors there, and filled out questionnaires. Our study design was analytical cross-sectional and sampling technique was non-probability purposive sampling. For data analysis, we used SPSS and applied Chi-square test to find association between different variables. For ethical consideration we took IRB approval from FMC, approval from PAF unit 1, 2 and PIMS, and consent from all participants.

**RESULTS:** Results showed that most of the donors were males, of the age group 21-40 years. Strongest motivational factor was Goodness/kindness and potential barrier was dizziness after donating blood and fear of decreased hemoglobin. Among psychological effects most of the people experienced a feeling of satisfaction after donating blood, and among physiological effects, weakness and dizziness had the highest percentage. Among adverse effects most people experienced change in blood pressure, drowsiness and hematoma formation. There was significant association of female gender with adverse effects.

**CONCLUSION:** Our study concludes that females donate less blood than males. Females reported less motivational factors, more potential barriers and more adverse effects than males.

**KEYWORDS:** Motivational factors, Potential barriers, and adverse effects after donating blood.

OP 3

**AN ANALYTICAL CROSS-SECTIONAL STUDY TO DETERMINE THE QUALITY OF WATER AND FREQUENCY OF WATER-BORNE DISEASES IN SUBURBAN AND SLUM AREAS OF ICT**

**Presenter:** Amina Munir

**Authors:** Amina Munir, Amama Afaq

**Affiliations:** Fazaia Medical College

**BACKGROUND:** About 20% of the population of Pakistan has access to safe drinking water. The remaining 80% of the population is forced to use unsafe drinking water due to the scarcity of safe drinking water. The focus of our study is to create awareness among communities about the importance of water purification and safe water in reducing diarrheal diseases for better health in all age groups.

**METHOD:** Data for diarrheal diseases and 100 water samples were collected by students of Fazaia Medical College, from door to door using purposive sampling from Shah Allahditta in autoclaved polythene-sealed bottles under the supervision of Nutrition Division, NIH, after consent. NUST developed a predictive model using Artificial intelligence software, which is in the process of labeling and tuning, it will help in determining the frequency of disease. Percentages, frequencies, and Chia square test were applied through SPSS. FMC IRB approval was taken.

**OBJECTIVES:** To determine the frequency of waterborne diseases and to check the quality of water in slum areas of Islamabad and to create among the communities about hazards of waterborne diseases

**RESULTS:** Frequency of diarrhea was significant in males (p-value 0.004), purification methods (p-value 0.008), low income (p-value 0.0125), laborers (p-value 0.0181) plastic containers (p-value 0.066), and using purification methods (p-value 0.0300). Fecal Coliform was present in 100% of samples, 20% of samples using tap water, spring water, wells, and CDA supply had E. coli. Boring water showed 2% E. coli.

**CONCLUSION:** Tap supply water, spring, and well water were highly contaminated with fecal Coliform and E. coli. Any type of purification method reduces diarrhea. Children under 5 and adults above 35 were highly susceptible to diarrheal diseases.

**KEYWORDS:** Waterborne diseases, water purification



OP 4

**INSIGHTS INTO BEHAVIORAL CHALLENGES IN ASD CHILDREN IN PESHAWAR  
AUTISM CENTERS AND PARENTAL PERSPECTIVES ON ITS MANAGEMENT: A  
MIXED METHOD STUDY**

**Presenter:** Malak Amanullah Khan

**Authors:** Shayan Sharif, M Afaq Khan Yousafzai, Yasir Afrid, Hamza Fazal

**Affiliations:** Peshawar medical college

**BACKGROUND:** Autism spectrum disorder (ASD) is a complex neurodevelopmental disorder characterized by repetitive behaviors and restricted interests, social impairments, and communication difficulties.

**OBJECTIVES:** To determine the Spectrum of common behavioral problems in children with autism and to explore Parental perception of autistic children about its available management and effectiveness.

**METHOD:** A mixed method study was conducted on Autistic children in Peshawar Autisms center in which a CBCL questionnaire were filled by parents of total sample 175(Rao soft with 95%confidence interval) in first phase within 3 months (Nov/2023-Jan/2024) while 10 in-depth interviews of 09 questions were taken from their parents in 2<sup>nd</sup> phase within 15 days (Feb /2024). Random sampling was used for quantitative data while purposive sampling was used for quantitative data collection. The qualitative data was analyzed using Virginia Braun and Victoria Clarke's thematic analysis method through NVivo 14, while the quantitative data was analyzed using SPSS 26 for measuring frequency, mean and total score.

**RESULTS:** In all, 135 questionnaires were filled by parents of Autistic children with a mean age of 3.5years. Among them the most prevalent behavioral issues were aggression (24%), attention problems (19%), withdrawal (16%), and somatic problems (15%). 44 codes were generated from the qualitative interviews, which were further divided into 15 categories and emerged into 4 themes. (1) Parental Challenges in Rearing ASD Children, (2) Goals and Effectiveness of early intervention in ASD, (3) Key Components of Successful Autism Management, (4) Parental Satisfaction & Suggestions.

**CONCLUSION:** In Peshawar autism centers, autistic children's exhibit behavioral issues like aggression and attention problems, which can be effectively addressed through early intervention. Many parents have witnessed notable improvements in their children's behavior with timely support and guidance and their advice to other parents to get proper awareness about autism.

**KEYWORDS:** Autism Spectrum Disorder; Child; Parent; Therapies.

OP 5

**FOSTERING DIGITAL HEALTH IN PAKISTAN: AN INTERVENTIONAL STUDY  
REGARDING AWARENESS OF TELEMEDICINE AMONG PATIENTS OF DIVERSE  
HEALTHCARE SETUPS IN ISLAMABAD**

**Presenter:** Elyzae Rizwan

**Authors:** Elyzae Rizwan, Shehbano Syed, Minal Zaman, Aiza Anwar, Muhammad Imad Naeem,  
Muhammad Junaid Hussain

**Affiliation:** Fazaia Medical College

**BACKGROUND:** Telemedicine is provision of healthcare services at a distance. With the rapidly increasing population in Pakistan and a chronic shortage of doctors in peri-urban and rural areas telemedicine has become the need of the time.

**OBJECTIVES:** This research was conducted to create general awareness on Telemedicine using an intervention, to assess differences between pre and post interventional awareness with an aim to provide suggestions for making telemedicine more accessible and thus reducing the burden of the health care system.

**METHOD:** A pre and post interventional study was conducted in various health care setups, on adults aged 18 and above who have been residents of Islamabad for over 6 months. Convenient sampling was done with a sample size of 98. Information was collected from the sample population both pre and post-intervention by a self-developed questionnaire filled through interviews. For intervention, an awareness session was conducted using a self-made video and a tutorial on how to use telemedicine platforms by the researchers.

**RESULTS:** Our pre & post-interventional grand mean score was 6.89 and 9.48 respectively and this difference was highly significant statistically as *p value was <0.001*.

**CONCLUSION:** We conclude that the majority of the participants hold a favorable attitude towards telemedicine services. They have the means to access telemedicine but are unable to do so due to a lack of awareness; hence, there is a need for education and awareness through government-supported programs to encourage the utilization of telemedicine services.

**KEYWORDS:** Telemedicine, Awareness of telemedicine, Willingness to use Telemedicine

OP 6

**DETERMINING THE KNOWLEDGE OF MBBS STUDENTS REGARDING SPREAD AND PREVENTION OF MONKEYPOX VIRUS.**

**Presenter:** Syed Tahir Hussain

**Author:** Syed Tahir Hussain

**Affiliation:** Central Park Medical College

**BACKGROUND:** The world has already seen a massive pandemic of COVID-19. The medical professionals are the first line of defense in this pandemic. In this regard, knowing about the spread of Monkeypox and its preventive measures could save us from another pandemic.

**OBJECTIVES:** This study was therefore designed to determine the knowledge and awareness of medical students regarding the spread and prevention of monkey-pox viral disease.

**METHOD:** It was a cross-sectional study comprising 406 medical students from 1<sup>st</sup> to final year MBBS of a private medical college in Lahore were enrolled through convenient sampling. The data were collected through a structured and validated questionnaire designed through google forms and administered by the researchers through WhatsApp groups. The data regarding mode of spread and prevention was analyzed statistically with a p-value <0.05 as significant.

**RESULTS:** Total 406 responses were collected. The mean age of the participants was 22±2 SD years. Regarding modes of spread of monkey-pox, the medical students had significant knowledge about different routes; 359(88.4%) respondents were aware of human to human transmission through respiratory secretions and vertical transmission ( $p < .001$ ), while 298(73.4%) respondents also regarded fomites as one of the modes ( $p < .001$ ). Regarding the prevention of spread, 359(88.4%) respondents picked each of the options of wearing masks, smallpox vaccination and prior infection with chickenpox or smallpox while 329(81%) and 309(76.1%) respondents regarded use of antivirals and isolation of affected person respectively as protective against Monkeypox ( $p < .001$ ).

**CONCLUSION:** The knowledge of medical students regarding spread and prevention of monkeypox seems satisfactory. This can be attributed to the inclusion of the disease in their curriculum and its status as an emerging global outbreak, with extensive information readily available through social media platforms.

**KEY WORDS:** Monkeypox virus, Spread, prevention, medical students, Knowledge, awareness

OP 7

**THE RELATIONSHIP BETWEEN SLEEP DEPRIVATION, COGNITIVE FUNCTION, AND ACADEMIC PERFORMANCE AMONG MEDICAL STUDENTS; A CROSS-SECTIONAL STUDY**

**Presenter:** Ayesha Basharat

**Authors:** Ayesha Basharat, Ayesha Abbas, Ayesha Javed, Khush Tabba, Danish Ali Ashraf, Hurmat Fatima

**Affiliations:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Sleep is a universally conserved phenomenon, essential for memory acquisition and retention. Sleep patterns have been linked in research to intellectual success and school performance. Studies dictated that students who have worse academic performance suffer from poor sleep quality, and poor sleep quality may negatively impact test performance as well, creating a vicious circle. Inadequate research on this topic in Pakistan and lack of its awareness encouraged us to pursue this study.

**OBJECTIVES:** To analyze the intensity of sleep deprivation among medical students, comprehend its effects on cognitive function, and investigate any relationships it may have with academic achievement.

**METHODS:** A quantitative cross-sectional study was conducted at various medical colleges of government and private sector across Pakistan over a duration of 6 months. The sample size (351) was calculated using open Epi software. Simple random sampling was used to collect data online using a validated questionnaire. SPSS 26 was used to assess the relationship between sleep deprivation, cognitive function and academic performance using the chi-square test, with statistical significance at  $p < 0.05$ .

**RESULTS:** The sample comprised 351 participants, all of whom were medical students currently enrolled in medical universities in Pakistan. A majority,  $n=223$  (63.5%), believed that increased sleep would enhance academic performance. Bad academic performance was reported by  $n=29$  (8.3%). Additionally, common cognitive challenges such as forgetfulness and distraction were reported by over 20% of the participants. More than 35% of participants did not face issues such as waking up in the middle of the night, taking longer than 30 minutes to fall asleep, getting up to use the bathroom, experiencing discomfort while breathing, loud coughing, or snoring in the past month.

**CONCLUSION:** The study demonstrated that despite the presence or absence of sleep deprivation, and regardless of the academic performance or cognitive functioning of the participants, more than 50% of our sample population believed that increased sleep would enhance their academic performance.

**KEYWORDS:** Sleep Deprivation, Academic Performance, Cognitive Function

OP 8

**ASSESSMENT OF VACCINATION HESITANCY AMONG PARENTS OF NEWBORNS VISITING PEDIATRICS DEPARTMENT OF FAUJI FOUNDATION HOSPITAL, RAWALPINDI: A CROSS-SECTIONAL STUDY**

**Presenter:** Ayesha Nousheen Malik

**Authors:** Ayesha Nousheen Malik, Haider Imran ,Fatima Zahra , Amna Murtaza, Aamna Imran , Aimal Kamran ,Maryam Abdul Moeed , Asma Noor , Maheen Nawaz

**Affiliations:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Vaccination is the most successful health service initiative saving enormous numbers of lives and reducing the prevalence of communicable diseases throughout the world. WHO identified the reluctance among people to vaccinate despite their all the time availability. Pakistan is one of the victims and it is more evident in vaccination for the infants. It is thought that the hesitancy is due to sociocultural, religious and health care factors. This study aims to perform thorough evaluation of the scientific literature to acknowledge the underlying concerns and address solutions for this problem.

**OBJECTIVE:** To assess the multiple perceived factors for the apparent hesitancy in vaccination uptake among parents.

**METHODS:** The cross sectional study was carried out in FFH, Rawalpindi over a period of six months from March 2024 to August 2024, 377 parents were included on the basis of non-probability convenient sampling. A validated and adapted questionnaire including demographic questions and PACV (Parents Attitude and Childhood Vaccination) Scale was selected and converted to Google form, for the parents to get it filled.

**RESULTS:** The study involved 395 parents at Fauji Foundation Hospital, Rawalpindi, primarily females and aged 25-45, with 72.6% having education above matriculate. Only 8.4% of parents were vaccine-hesitant, and 13.7% had delayed vaccinations for non-medical reasons. Most parents (78.2%) supported the recommended vaccine schedule, and 92.2% would vaccinate their infants. Trust in vaccine information and health care providers was high, with 92.2% trusting the information they received and 86.1% comfortable discussing concerns with doctors.

**CONCLUSION:** This study examined vaccine hesitancy among parents in Islamabad and Rawalpindi, finding that only 8.4% were hesitant, despite concerns about vaccine safety and side effects. Socioeconomic status was not a significant factor, but divorced parents were more likely to be hesitant. The study suggests that current vaccination strategies are effective but recommends targeted educational

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campaigns to address misinformation, especially in rural areas. Further research on vaccine hesitancy among divorced parents and broader studies across Pakistan are needed.

**KEYWORDS:** Vaccination, Health knowledge, Vaccine Hesitancy, Infants, Parents



OP 9

**IN SEARCH OF A BETTER MORROW: PREVALENCE OF JOB DISSATISFACTION  
AND TURNOVER INTENTIONS AMONG YOUNG DOCTORS**

**Presenter:** Arwaa Chaudhry

**Author:** Arwaa Chaudhry

**Affiliation:** Federal Medical College

**BACKGROUND:** In recent years a stark surge in medical brain drain as well as an increase in turnover intentions has been observed in physicians and residents in Pakistan. Already struggling with a gigantic gap in doctor to patient ratio which has mounted to 1:1300 in 2023, turnover intentions can prove to be lethal for an already crumbling healthcare system. Hence, this study attempts to explore the relationship between job dissatisfaction and turnover ratio in Pakistan

**OBJECTIVES:** To determine prevalence of job dissatisfaction and turnover intentions among young doctors in tertiary care hospitals in Islamabad

**METHODS:** A qualitative study based on in-depth interviews was conducted with 16 young medical doctors, aged 25-30 years, who had studied medicine in Pakistani Medical universities, were Pakistani nationals, and were employed at various hierarchical levels i.e., House Officers and Residents in a tertiary level hospital in Islamabad.

**RESULTS:** Each interviewee had been in the clinical field for more than a year. Descriptions covered four themes of: Experience, Demotivating Factors, Turnover Intention and Working Environment. Many of the Interviewees' were of the view that after being exposed to the hospital environment, they observed a change in their perspective from idealistic as a med student to being a realist as a professional. They described how the working environment was an impediment in their growth with long working hours and less pay. Another factor mentioned was the lack of cooperation from the senior professionals who were often quoted to resort to brusque behavior, gate-keeping and being one of the chief de-motivators. Many of the interviewee's affirmed their turnover intention whether in terms of shifting their field altogether i.e., CSS, moving towards teaching or applying for residency abroad.

**CONCLUSION:** Turnover intentions among young doctors is directly proportional to job dissatisfaction stemming from lack of facilities as well as a frustrating working environment.

In order to curb such a drain of physicians, policies on governmental level need to be introduced in order to facilitate young doctors in establishing their careers. Less working hours, proper adherence of shift

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schedule, congeniality among hospital colleagues and administration might be observed in order to create an adequate work-life balance for doctors in the public health sector in Pakistan.

**KEY WORDS:** Turn-over, Medical Brain Drain, Healthcare, Job Satisfaction

OP 10

**EFFECT OF VITAMIN D ON POSTOPERATIVE ATRIAL FIBRILLATION IN PATIENTS WHO UNDERWENT CORONARY ARTERY BYPASS GRAFTING: A SYSTEMATIC REVIEW AND UPDATED META-ANALYSIS**

**Presenter:** Hurmat Fatima Bhatti

**Authors:** Participants from Different Colleges

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Postoperative Atrial fibrillation (POAF) is the most common complication following coronary artery bypass graft (CABG) surgery. Recent studies suggest that vitamin D deficiency may be a risk factor for POAF.

**OBJECTIVES:** This meta-analysis aims to evaluate the effect of preoperative vitamin D supplementation on the incidence of POAF and related outcomes in patients undergoing CABG.

**METHODS:** A comprehensive literature search was conducted on PubMed, Cochrane Library, Embase and Web of Science for relevant articles published up to April 2024. Randomized control trials (RCTs) reporting the effect of vitamin D on the incidence of AF following CABG were included. Statistical analyses were conducted using the random effects model with Revman (version 5.4). Cochrane risk of bias tool was used to analyze risk of bias.

**RESULTS:** Four RCTs with a combined sample size of 694 participants (342 intervention, 352 control) were included. Vitamin D supplementation significantly reduced the risk of POAF (RR: 0.55; 95% CI: 0.40-0.76;  $p=0.0003$ ;  $I^2=8\%$ ). High doses of vitamin D were more effective (RR: 0.47; 95% CI: 0.23-0.98;  $p=0.05$ ) compared to lower doses (RR: 0.56; 95% CI: 0.36-0.86;  $p=0.009$ ). Patients with ejection fraction  $<50\%$  also showed a significant reduction in POAF risk (RR: 0.45; 95% CI: 0.29-0.71;  $p=0.0006$ ). However, vitamin D had no significant impact on the length of hospital stay.

**CONCLUSION:** Preoperative vitamin D supplementation significantly reduces the incidence of POAF, suggesting it could be a valuable preventive strategy.

**KEYWORDS:** Postoperative Atrial Fibrillation (POAF), Coronary Artery Bypass Graft (CABG), Vitamin D Supplementation, Meta-Analysis, Cardiac Surgery

OP 11

**FROM TRADITIONAL TO DIGITAL: ASSESSING POST-COVID-19 COGNITIVE  
IMPAIRMENT WITH COGQUEST IN ISLAMABAD AND RAWALPINDI**

**Presenter:** Noor Ul Ain Ansar

**Authors:** Noor Ul Ain Ansar, Hareem Mobeen, Amna Jahangir, Muhammad Hamza Imtiaz

**Affiliation:** Fazaia Medical College

**BACKGROUND:** COVID-19 has been linked to long-term cognitive impairment, but comprehensive assessments in Pakistan are lacking. This study uses innovative digital tools to assess cognitive impairment in Islamabad and Rawalpindi, addressing critical research gaps and guiding effective screening and intervention strategies.

**OBJECTIVES:**

- Develop a mobile application to assess objective and subjective post-COVID-19 cognitive impairment.
- Compare cognitive performance between individuals with and without COVID-19 infection.
- Evaluate the app's sensitivity against the conventional MoCA paper version 7.1.

**METHODS:** An analytical cross-sectional study was conducted on 80 individuals using non-probability convenience sampling. Post-COVID-19 cognitive impairment was assessed with CogQuest and MoCA paper version 7.1. The app, developed with Google Flutter and Firebase, includes socio-demography and health forms, MoCA test and Cognitive Failures Questionnaire, featuring self-administration, on-screen drawing, speech-to-text, automatic scoring and personalized feedback. Data was analysed with SPSS 23.0 and Chi-Square tests.

**RESULTS:** CogQuest demonstrated 4% greater sensitivity than MoCA paper version 7.1. No significant associations were found between COVID-19 infection and MoCA scores ( $p > 0.881$ ) or CFQ scores ( $p > 0.799$ ).

**CONCLUSION:** CogQuest's enhanced sensitivity underscores the potential of digital tools in advancing cognitive assessments, offering greater accuracy, efficiency and accessibility than traditional methods.

**KEY WORDS:** Post-COVID-19 cognitive impairment, CogQuest, MoCA, CFQ

OP 12

**NON- RAPID EYE MOVEMENT PARASOMNIAS AND THEIR IMPACT ON ACADEMIC PERFORMANCE IN MEDICAL UNIVERSITY STUDENTS: A CROSS-SECTIONAL STUDY**

**Presenter:** Fatima Iftikhar

**Authors:** Fatima Iftikhar, Kaynat Aamir, Sohaib Mushtaq, Izza Zahra, Ahmed Ali Khan, Danish Ali Ashraf

**Affiliations:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Parasomnias are disruptive motor episodes during sleep transitions, classified into rapid eye movement (REM) and non-rapid eye movement (NREM) types. NREM parasomnias (arousal disorders) include confusional arousals, sleepwalking, and sleep terrors. This study aims to ascertain the prevalence of arousal disorders, their association with sleep quality, and their impact on the academic performance of university students.

**METHOD:** A quantitative cross-sectional study was carried out with validated questionnaires to collect online data using stratified random sampling after obtaining ethical approval from the ethical review board of Foundation Medical College. Rao soft was used to determine the sample size. The study included both male and female MBBS students at Foundation University School of Health Sciences. All descriptive and inferential statistical tests were applied using SPSS 26, and a p-value of < 0.05 was considered statistically significant.

**RESULTS:** The sample consisted of n=175 participants of ages ranging from 18-25 years [ $19.82 \pm 3.99$ ]. There were n = 96 (54.9%) female participants and n = 79 (45.1%) male participants in terms of gender distribution. The PSQI (Pittsburgh Sleep Quality Index) score of participants ranged from 0-15 with a mean PSQI score of  $6.74 \pm 3.15$  (PSQI score of  $\geq 5$  is indicative of poor sleep quality). On assessing the prevalence of NREM parasomnias a total of n=84 (48%) had confusional arousals, n=29 (16.6%) had sleepwalking, and n=74 (42.3%) had sleep terror. The results of the ANOVA test indicate no significant association ( $p=0.387$ ) between academic performance (last exam score) and sleep quality (PSQI score). The t-test suggests a significant association between sleep quality (PSQI score) and the occurrence of confusional arousals ( $p=0.006$ ), sleepwalking ( $p=0.03$ ), and sleep terror ( $p=0.04$ ). The Pearson chi-square test yields a significant association between academic performance (last exam score), and sleepwalking ( $p=0.037$ ).

**CONCLUSION:** The study reveals a notable prevalence of NREM parasomnias among medical students. The study concludes that individuals with poor sleep quality (high PSQI scores) are more likely to experience NREM parasomnias.

**KEYWORDS:** NREM parasomnias, arousal disorders, academic performance, sleep quality

## A COMPARATIVE ANALYSIS OF DIETARY HABITS AND NUTRITIONAL KNOWLEDGE AMONG MEDICAL AND NON-MEDICAL UNDERGRADUATE STUDENTS OF ISLAMABAD AND RAWALPINDI: A CROSS-SECTIONAL STUDY

**Presenter:** Muhammad Talha Farrukh

**Authors:** Muhammad Talha Farrukh, Bakhtawar Mohsin, Unaiza Iqbal, Ahmed Rehan, Eeman Ahmad, Danish Ali Ashraf

**Affiliations** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Obesity and cardiovascular diseases are leading causes of mortality, and understanding the factors that influence dietary habits is critical for prevention. However, the correlation between nutritional knowledge and dietary habits remains unclear.

**OBJECTIVE:** This study aimed to assess the relationship between nutritional knowledge and dietary practices among university students, comparing medical and non-medical students.

**METHODS:** A quantitative cross-sectional study was conducted among male and female undergraduate students, with a mean age of 21 years, following approval by the institutional ethics review committee. The sample size was calculated using OpenEpi software, and data were collected via a validated questionnaire using convenience sampling. Statistical analysis was performed using SPSS 26, with  $p < 0.05$  considered statistically significant. Ethical approval was obtained from the FUSH ERC committee.

**RESULTS:** The study analyzed data from 194 students (medical:  $n=92$ , non-medical:  $n=102$ ), aged 18 to 25. Pearson Correlation and Chi-Square tests found no significant correlation between nutritional knowledge and dietary habits ( $p=0.908$ ,  $p=0.106$ ). However, a T-test revealed a significant difference in nutritional knowledge between medical and non-medical students ( $p < 0.001$ ), though this did not translate to differences in dietary habits ( $p=0.248$ ). Subgroup analysis further showed no significant association between nutritional knowledge and dietary habits within either group ( $p=0.693$  for medical students and  $p=0.414$  for non-medical students).

**CONCLUSION:** Nutritional knowledge does not significantly impact dietary habits. While medical students have greater nutritional knowledge, this does not necessarily lead to healthier dietary practices.

**KEYWORDS:** Nutritional knowledge, Dietary habits, Obesity, Cardiovascular diseases, University students



OP 14

**PREVALENCE AND FACTORS ASSOCIATED WITH EATING DISORDERS AMONG MALE MEDICAL STUDENTS OF A PRIVATE UNIVERSITY- A CROSS-SECTIONAL STUDY**

**Presenter:** Hanzala Jameel

**Authors:** Emaan Mahmood, Haiya Mahmood, Mahnoor Shahid, Irsa Irfan, Zainab Raza, Fakiha Ahmed, Qaisra Asghar, Azhar Shafi, Ali Ahmed, Hanzala Jameel

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** There are several types of eating disorders that include anorexia nervosa, bulimia nervosa and binge eating disorder. It's a type of behavioral change which encompasses eating too much or too little because of several risk and triggering factors, often associated with negative thoughts and feelings. It is a serious health condition that affects an individual's physical and mental health, and is prevalent among students because of academic and professional stress.

**OBJECTIVES:** To determine the prevalence of eating disorders and potential factors associated with it, among male students at FUMC.

**METHODS:** It is a cross-sectional study on 240 male students of Foundation University Medical College Islamabad. After approval from the ethical review committee, a validated and structured questionnaire was adapted and provided to students to fill after obtaining their consent. The data was analyzed in IBM SPSS version 21.

**RESULTS:** The mean age, height and weight was 21.48, 1.76m and 152.49 lbs respectively. The mean EAT-26 score was 17.19, mean BITE SYMPTOMS SCORE was 17.30 and the mean BITE SEVERITY SCALE was 5.11. The total positives were 74(36.6%) and the total negatives were 128(64.4%). EAT POSITIVE means that there is an increased likelihood of having a serious eating disorder.

**CONCLUSION:** According to the EAT test the total positives were 74(36.6%). On BITE severity scale 109 were insignificant, whereas, 80 were clinically significant 13 of which had a high degree of severity. These cases were referred to clinical psychologists, while maintaining confidentiality and have been receiving counseling on campus.

**KEYWORDS:** Eating disorder, SPSS, BITE, EAT

## HOME VS. HOSTEL: INVESTIGATING MENTAL HEALTH OUTCOMES IN ISLAMABAD'S FIRST YEAR MEDICAL UNDERGRADUATES THROUGH A CROSS-SECTIONAL APPROACH

**Presenter:** Haseeb Hassan

**Authors:** Haseeb Hassan Muhammad Abdullah, Malika Nadeem Fatima Sarwar Maryam Kashif

**Affiliation:** NUST School of Health Sciences

**BACKGROUND:** The demanding nature of medical education raises significant concerns about students' mental health. This study compares the mental health outcomes of hostel residents and day scholars (non-hostel residents) among first-year MBBS students, focusing on the differing environmental factors they experience. Day scholars enjoy the comfort of home, while hostel residents face additional challenges in balancing academics with daily life, potentially increasing mental stress.

**OBJECTIVE:** To compare the mental health outcomes of hostel residents and day scholars among MBBS students and to explore the impact of living conditions on mental health.

**METHODS:** The study employed the Depression Anxiety Stress Scale (DASS-21), with responses collected via a Google Forms questionnaire. Data were analyzed using SPSS.

**RESULTS:** Among hostel residents, 76% were normal to moderately depressed, and 24% were severely to extremely depressed; 36% were normal to moderately anxious, while 64% were severely to extremely anxious; 88% were normal to moderately stressed, with 12% severely to extremely stressed. In contrast, among day scholars, 92% were normal to moderately depressed, 8% were extremely depressed; 52% were normal to moderately anxious, 48% were severely to extremely anxious; 96% were normal to moderately stressed, with 4% extremely stressed.

**CONCLUSION:** The study found that hostel residents experience higher levels of anxiety, depression, and stress compared to day scholars. This suggests that the additional stressors associated with hostel life contribute to poorer mental health outcomes, highlighting the need for targeted support for hostel resident students. Educational institutions should develop effective support services based on these findings.

**KEYWORDS:** Mental health, Medical students, Hostel residents, Stress, Anxiety

OP 16

## IMPACT OF SLEEP QUALITY ON ACADEMIC PERFORMANCE OF MEDICAL STUDENTS

**Presenter:** Shahab Afridi

**Authors:** Shahab Afridi, Sarmad Nazir, Sameer Haider, Shaharbano, Rubata Aimen, M. Iltaf, Gulwash Khan

**Affiliation:** Ayub Medical College

**BACKGROUND:** Sleep is vital for maintaining physical and mental health, and its quality significantly impacts the academic performance of medical students. This study aimed to determine the association between sleep quality and academic performance among students at Ayub Medical College.

**OBJECTIVE:** To assess the effect of sleep quality on the academic performance of medical students at Ayub Medical College, Abbottabad.

**METHODS:** A cross-sectional study was conducted at Ayub Medical College with ethical approval from the relevant committees. Data were collected using a questionnaire that included demographic information and standardized scales (Pittsburgh Sleep Quality Index and Academic Performance Scale). The study population consisted of MBBS and BDS students, with data collected via non-probability convenience sampling. Out of 1,100 distributed questionnaires, 624 were completed and included in the analysis. The study spanned three months (August to October 2023). Data were analyzed using SPSS 27, categorizing sleep quality as high (0-7), moderate (8-14), or poor (15-21) based on the Global PSQI score.

**RESULTS:** Of the 624 respondents, 383 reported high sleep quality, with 16.18% achieving excellent academic performance. Among those with moderate sleep quality (n=235), 11.06% were excellent performers. Only 6 students reported poor sleep quality, with none achieving excellent academic performance. The association between sleep quality and academic performance was statistically significant (p=0.005).

**CONCLUSION:** The study concludes that most students with high to moderate sleep quality tend to have well to excellent academic performance, suggesting that better sleep quality positively influences academic success.

**KEYWORDS:** Sleep quality, Academic performance, Students

## LANSOPRAZOLE PLUS LEVOSULPIRIDE VERSUS ESOMEPRAZOLE IN PARTICIPANTS WITH GASTROESOPHAGEAL REFLUX DISEASE AND EROSIVE ESOPHAGITIS: A DOUBLE BLINDED RANDOMIZED CONTROL TRIAL

**Presenter:** Faraz Hassan Ali Orakzai

**Authors:** Haris Mumtaz, Muhammad Rizwan Umer, Hamna Javed

**Affiliation:** Rawalpindi Medical University

**BACKGROUND:** The research compares efficacy and safety of lansoprazole plus levosulpiride versus esomeprazole alone in treating GERD and erosive esophagitis. Participants were randomized, and outcomes were measured via endoscopy and quality of life assessments. Ethical approval and informed consent were obtained.

**OBJECTIVES:** The aim was to compare the efficacy and safety of Lansoprazole plus levosulpiride over esomeprazole.

**METHODS:** This randomized control trial recruited 1000 participants having symptomatic gastroesophageal reflux disease (GERD) and erosive esophagitis and they were blindly randomized into two groups in a 1:1 ratio with appropriate concealment. Group 1 was given lansoprazole plus levosulpiride combination twice daily whereas group 2 was prescribed only esomeprazole twice daily. The primary efficacy endpoint was the healing of erosive esophagitis and GERD at week 49. Secondary assessments included improvement in quality of life. Participants' quality of life was assessed before starting the treatment and post-treatment using a short-form health survey questionnaire (SF-36).

**RESULTS:** The lansoprazole plus levosulpiride group had significantly lower rates of positive post intervention GERD and erosive esophagitis status, and higher rates of sustained resolution of heartburn compared to the esomeprazole alone group. However, the lansoprazole plus levosulpiride group also had a higher risk of nausea.

**CONCLUSION:** Lansoprazole plus levosulpiride is a more effective and safe treatment for GERD than esomeprazole alone. Participants in the lansoprazole plus levosulpiride group showed a significantly higher rate of sustained resolution of GERD, lower rates of post intervention GERD and erosive esophagitis status, and a higher incidence of nausea compared to the esomeprazole alone group. Although quality of life worsened in both groups, adverse effects did not significantly differ. These findings strongly support the use of lansoprazole plus levosulpiride as a preferred treatment option for GERD and

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1<sup>ST</sup> October 2024

erosive esophagitis, which could have significant clinical implications for managing this common condition.

**KEYWORDS:** esomeprazole, gastroesophageal reflux, lansoprazole, levosulpiride, quality of life

## IMPACT OF INTERMITTENT FASTING WITH KETO DIET ON AMPK LEVELS IN BREAST CANCER PATIENTS RECEIVING CHEMOTHERAPY

**Presenter:** Ahsan Khan Lughmani

**Authors:** Ahsan Khan Lughmani, Nouman Ibrahim, Hamza Sajjad, Wasiq Ali, Yasmeen Bibi

**Affiliation:** Frontier Medical and Dental College

**BACKGROUND:** Adenosine monophosphate-activated protein kinase (AMPK) is a metabolic sensor that is activated in response to nutrient starvation. Studies related to the pro and anti-tumorigenic effects of AMPK levels in cancer were found to be controversial. Further, aberration in tumor glucose metabolism in cancer patients contributes to acquiring resistance to anti-cancer drugs.

**OBJECTIVES:** The purpose of this study was to observe AMPK levels in breast cancer patients receiving chemotherapy and compare them with the levels after intermittent fasting.

**METHODS:** Forty-five breast cancer patients receiving chemotherapy were recruited from the Institute of Oncology and Radiology (INOR), Abbottabad. After ethical approval and informed consent, they were divided equally into 3 groups by selective preference of dietary intervention following dietary counseling. Group 1 acted as the control group, group 2 patients had to observe 23:1 hours intermittent fasting with a routine diet (RD), and group 3 patients had to observe 23:1 hours intermittent fasting with keto diet (KD). This fasting was carried out for a period of 4 weeks. Body mass index, cancer antigen 15-3 (CA 15-3) levels and serum AMPK levels were measured pre and post-intervention.

**RESULTS:** AMPK levels were found to be high in both the fasting groups and significantly lower in the non-fasting group. Interestingly, the AMPK levels were significantly higher in the keto diet group as compared to the routine diet group. CA 15-3 levels were reduced in all the groups but significantly reduced in the KD group as compared to the RD group.

**CONCLUSION:** This study shows that intermittent fasting with keto diet improves AMPK levels and can be adopted as a non-pharmacological complementary strategy for reducing or eliminating the tumor and simultaneously, preventing the healthy cells from toxic side effects of chemotherapy.

**KEYWORDS:** Breast cancer, AMPK, intermittent fasting, ketogenic diet, CA 15-3



## KNOWLEDGE AND PRACTICES OF SAFE BLOOD TRANSFUSION PROTOCOLS AMONG NURSES IN TERTIARY CARE HOSPITALS OF TWIN CITIES OF PAKISTAN: A CROSS-SECTIONAL STUDY

**Presenter:** Areeba Ahsan

**Authors** Suleman Mehmood, Areeba Ahsan, Eisha Shahbaz, Maryam Naeem, Inshaal Fatima, Danish Ali Ashraf

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Blood transfusion is a routine clinical practice that needs to be handled with care. Given nurses' pivotal role, inadequate knowledge regarding blood transfusion can lead to serious complications, emphasizing the need for extensive training and expertise.

**OBJECTIVES:** To evaluate nurses' knowledge and practices of safe blood transfusion principles, as well as to assess the possible associations between competency of nurses in executing safe blood transfusion practices and sociodemographic factors.

**METHODS:** A cross-sectional study was conducted on licensed nurses in tertiary care hospitals of twin cities over a span of 6 months. The sample size was calculated using Open-Epi software. Data was collected using a previously validated questionnaire with non-probability convenience sampling after ethical approval from FUMC ERC. Descriptive and inferential statistical tests were applied using SPSS 26. A p-value of <0.05 was considered statistically significant.

**RESULTS:** Our study included a sample of 169 nurses, with 97 (57.4%) employed in government sector and 72 (42.6%) in private sector, out of which (39) 23% were male and (139) 76.9% were female, with the mean age of  $32.89 \pm 9.079$  years. A total of 103 nurses (60%), of which 44 from government and 59 from private sector exhibited above-average knowledge and practices concerning safe blood transfusion principles ( $12 \pm 1.00 = 48.5\%$ ). The t-test indicated a significant difference in average knowledge scores between the nurses in private and government hospitals ( $p\text{-value}=0.00$ ) as well as a significant association between gender and nursing competence ( $p\text{-value}=0.00$ ). ANOVA revealed that the influence of working experience and qualifications on nursing competency was minimal (1.7%).

**CONCLUSION:** Though most of our sample demonstrated satisfactory knowledge regarding safe blood transfusion protocols however a very large portion did not. This highlights the need to focus on this group with focused awareness and educational programs to improve their understanding.

**KEYWORDS:** Blood transfusion, nurses, knowledge, practices, sociodemographic factor

OP 20

**ASSESSMENT OF KNOWLEDGE AND AWARENESS OF RISK FACTORS AND WARNING SIGNS OF STROKE AMONG THE STUDENTS OF FOUNDATION UNIVERSITY SCHOOL OF HEALTH SCIENCES**

**Presenter:** Syed Alyeez Raza Bokhari

**Authors:** Syed Alyeez Raza Bokhari, Hamza Bin Zubair, Aleena Ahmed, Muhammad Ibrahim, Nihal Moarij Azeem Malik, Danish Ali Ashraf

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Stroke is a life-threatening condition that requires immediate medical attention. For a patient suffering from stroke to receive adequate treatment, medical students should be knowledgeable about stroke management and risk factors.

**OBJECTIVES:** To assess the knowledge and awareness of risk factors and warning signs of stroke among the students of Foundation University School of Health Sciences.

**METHODS:** A cross-sectional, quantitative study was conducted in the Foundation University School of Health Sciences over a duration of six months. The sample size was calculated using open epi with CI-95%. Data was collected from students of the MBBS, BDS, DPT, and nursing departments using non-probability convenience sampling. Respondents were interviewed on a pre-structured, validated questionnaire. Descriptive and inferential statistical tests like the t-test and ANOVA were applied using SPSS 26. A p-value <0.05 was considered significant for all statistical interpretations.

**RESULTS:** A sample size of 188 participants, including 63 (33.5%) males and 125 (66.5%) females with an age range of 18-25 years (mean=21.4 years, SD  $\pm$  1.4), was analyzed. About 89% (n =168) had adequate knowledge about stroke risk factors and management. 69.1% of the participants (n =130) agreed that they would call an ambulance if a person had a stroke in front of them. 30.9% (n =58) chose thrombolysis as the best treatment for dealing with stroke. 25.5% (n =48) agreed that women are more affected by stroke than men. There was a discrepancy amongst the responses of males and females regarding risks, emergency response, and gender group more affected by stroke. (p value<0.05).

**CONCLUSION:** The majority of medical students have a sufficient level of knowledge regarding the risk factors of stroke and a neutral attitude toward the management of the condition. Awareness about the risk factors of stroke in society can be increased.

**KEYWORDS:** Stroke, awareness, risk factor, management, knowledge.

OP 21

## IMPORTANCE OF COUNSELING RELATED TO ANXIETY AND STRESS IN MAJOR ELECTIVE SURGICAL PATIENTS

**Presenter:** Maryam Ijaz

**Authors:** Maryam Ijaz, Malaika Manzoor, Fatima Shahid, Ifra Jamil

**Affiliation:** Fazaia Medical College

**BACKGROUND:** The mental health of surgical patients is often overlooked in Pakistan, with pre-operative anxiety prevalence reaching up to 62%, which can adversely affect recovery. This study highlights the importance of professional counseling in reducing stress and aiding in the healing of surgical patients.

**OBJECTIVES:**

1. To evaluate the importance of counseling and addressing patient concerns in reducing preoperative anxiety.
2. To assess factors contributing to anxiety and distress in post-operative surgical patients.

**METHODS:** This quasi-experimental study included 98 preoperative elective surgical patients selected via purposive sampling and divided into two groups through simple random sampling. The experimental group (n=49) received counseling from trained researchers, while the control group (n=49) received standard information from their doctors. Anxiety scores were measured 24 hours post-surgery using the Surgical Fear Questionnaire (SFQ) and Hamilton Anxiety Rating Scale (HAM-A). Data were analyzed with SPSS 23 using descriptive and inferential statistics, including t-tests and chi-square tests.

**RESULTS:** Significant factors associated with anxiety included anxious mood, insomnia, depressed mood, somatic symptoms, and respiratory and gastrointestinal symptoms. Gender, education, age, financial status, and availability of support were also significant factors influencing anxiety levels.

**CONCLUSION:** The study rejected the null hypothesis, demonstrating that professional counseling significantly reduces anxiety and stress in surgical patients, emphasizing the need for health professionals to engage with patients about their concerns.

**KEYWORDS:** Elective surgery, Anxiety levels, Stress, Surgical patients, Counseling

## GASTROINTESTINAL MANIFESTATIONS OF DENGUE INFECTION: A CROSS SECTIONAL STUDY AT HOLY FAMILY HOSPITAL

**Presenter:** Aiman Afkar Abbasi

**Authors:** Muhammad Ibrahim, Hadia Eiman, Qurat Ul Ain Muhammad

**Affiliation:** Rawalpindi Medical University

**BACKGROUND:** Dengue is widespread in tropical and subtropical regions, with gastrointestinal (GI) symptoms being common among affected patients. Approximately 40.6% of dengue patients experience hepatitis, along with symptoms such as abdominal pain and nausea. Other complications include acute liver injury, cholecystitis, pancreatitis, parotitis, and febrile diarrhea.

### OBJECTIVES:

1. To determine the prevalence and types of GI symptoms in dengue patients.
2. To study the correlation between dengue severity and GI manifestations.
3. To identify predictors of GI manifestations in dengue fever.

**METHODS:** This study was conducted at Holy Family Hospital, Rawalpindi, involving dengue cases that met specific criteria. Data on demographics, lab results, GI symptoms, and imaging were collected and analyzed using SPSS, with significance set at  $p < 0.05$ .

**RESULTS:** The study included 245 confirmed dengue patients, with a mean age of  $44 \pm 41$  years (70.2% male, 29.8% female). The most common GI symptoms were nausea/vomiting (73.1%), abdominal pain (48.2%), and gallbladder wall thickening (35.5%). The mean platelet count at the onset of GI symptoms was 60,270 cells/mm<sup>3</sup>, and the mean WBC count was 5,757 cells/mm<sup>3</sup>. Pancreatitis onset correlated with a minimum platelet count measured within 0.78 days of illness, compared to 3.6 days in those without pancreatitis ( $p = 0.002$ ). The minimum WBC count, observed around 0.72 days, was significantly linked to pancreatitis onset ( $p = 0.003$ ).

**CONCLUSION:** GI symptoms in dengue patients are indicative of disease severity. Early diagnosis and monitoring of laboratory indicators like WBC and platelet counts can improve treatment outcomes and facilitate faster recovery.

**KEYWORDS:** Dengue, Severe Dengue, Abdominal Pain, Splenomegaly, Hepatitis, Pancreatitis

OP 23

## MATERNAL AND NEONATAL OUTCOME IN WOMEN WITH AND WITHOUT THREATENED ABORTION

**Presenter:** Arfa Sohail Miraj

**Authors:** Arfa Sohail Miraj, Sara Pervaiz, Shahzaib Nadeem, Hafiz Sarmad Latif, Esha Mushtaq, Filzah Kamran

**Affiliation:** Fazaia Medical College

**BACKGROUND:** Threatened abortion refers to vaginal bleeding before 20 weeks of pregnancy, complicating about one-fourth of pregnancies and resulting in abortion in 12% to 57% of cases. Understanding the outcomes for both mother and fetus, as well as identifying risk factors, is essential.

**OBJECTIVE:** To determine the proportion of postnatal females who experienced threatened abortion and to identify associated risk factors.

**METHODS:** A case-controlled study was conducted on 30 postnatal females with a history of threatened abortion (case group) and 60 without it (control group), matched by age and parity at PAF Hospitals. Data collected included socio demographic information, detailed medical history, lab investigations, and maternal and neonatal outcomes. Analysis was performed using SPSS version 23.

**RESULTS:** Threatened abortion was observed in 33.33% of the participants. Significant risk factors included gestational diabetes (OR: 9.333,  $p=0.000$ ), gestational hypertension (OR: 3.059,  $p=0.020$ ), and placenta previa (OR: 10.545,  $p=0.001$ ). Maternal outcomes such as cervical incompetence (OR: 0.0189,  $p<0.001$ ) and PROM (OR: 4.154,  $p=0.022$ ), and neonatal outcomes like respiratory distress syndrome (OR: 7.709,  $p=0.001$ ) and neonatal jaundice (OR: 3.176,  $p=0.015$ ) were more frequent in the case group. The miscarriage rate was also significantly higher in the case group (84.6% vs. 15.4%). Other pregnancy outcomes did not show significant differences.

**CONCLUSION:** Gestational diabetes, gestational hypertension, and placenta previa were significantly associated with threatened abortion. Maternal and neonatal complications were also more prevalent among those who experienced threatened abortion.

**KEYWORDS:** Threatened abortion, vaginal bleeding, Post-natal females, maternal outcomes, Neonatal outcomes.

OP 24

**AWARENESS ABOUT BLOOD DONATION AMONG COLLEGE GOING STUDENTS  
OF ISLAMABAD- A PRE AND POST INTERVENTIONAL STUDY**

**Presenter:** Aneela Maryam

**Authors:** Aneela Maryam, Javeriya, Amna Ahmad, Eman Fatima, Aftab Hakeem

Dr Arshia Bilal, Dr Asifa Afzal

**Affiliation:** Fazaia Medical College

**BACKGROUND:** Blood donation is an act of voluntarily drawing one's own blood and donating it for the well-being of a needy person. Awareness about blood donation should be created so that people get encouraged and donate blood. Our study, conducted in Islamabad, aims to promote blood donation among college going students of Islamabad.

**OBJECTIVES:** To assess the awareness of college going students of Islamabad about blood donation and to identify the barriers about blood donation. To counsel about blood donation and assess their post-counseling awareness and compare their pre and post counseling awareness.

**METHODS:** This pre and post interventional study was conducted among 214 undergraduate students of Fazaia bilquis college Islamabad, aged 19-21 years using non-probability convenient sampling method. Data was collected using a self-developed questionnaire, comprising sections for informed consent, socio-demographics and awareness related questions about blood donation. For intervention we had delivered a session addressing the topic of awareness about blood donation by using power point presentation and a video related to blood donation.

**RESULTS:** The pre and post awareness questions were scored and mean scores were calculated. Paired t test was applied setting the alpha at 5%. A p-value of 0.000 indicates that results were statistically significant.

**CONCLUSION:** Counseling sessions raised the awareness related to blood donation as the association between pre and post knowledge is statistically significant. Motivating youth for blood donation is a cost effective, futuristic investment for saving the lives of thousands of people.

**KEYWORDS:** Blood donation, barriers, awareness, college students, intervention

OP 25

**COMPARATIVE EFFICACY OF ABBREVIATED DUAL ANTIPLATELET THERAPY FOLLOWED BY P2Y12 INHIBITOR MONOTHERAPY VERSUS STANDARD DUAL ANTIPLATELET THERAPY IN ACS PATIENTS POST-PCI: A SYSTEMATIC REVIEW AND META ANALYSIS**

**Presenter:** Shabnam Ijaz

**Author:** Shabnam Ijaz

**Affiliations:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Percutaneous Coronary Intervention (PCI) has led to improved outcomes in the patients suffering from Acute Coronary Syndrome (ACS). Dual Antiplatelet Therapy (DAPT) with aspirin and a P2Y12 inhibitor is the standard Post-PCI treatment but is associated with increased risk of bleeding. This meta-analysis reviews the evidence and compares the P2Y12 inhibitors monotherapy to DAPT in reducing bleeding and major adverse cardiovascular outcomes in patients undergoing PCI after ACS.

**METHODS:** The meta-analysis was conducted according to PRISMA guidelines. We searched PubMed, EMBASE, MEDLINE, Scopus, Cochrane, CENTRAL, Google Scholar and Web of Science from inception till June 2024 for randomized controlled trials (RCTs) using P2Y12 inhibitors monotherapy in post-PCI patients. Primary endpoints analyzed included the incidence of TIMI (Thrombolysis in Myocardial Infarction) major and minor bleeding as well as major adverse cardiovascular outcomes. Analysis was done using RevMan (version 5.3) with Hazard Ratio (HR) and 95% Confidence interval (CI) as our effect measures. A p-value of less than 0.05 was considered significant.

**RESULTS:** We included seven trials with 36,015 participants and a mean follow-up time of 12 months in our meta-analysis. The incidence of TIMI major and minor bleeding was significantly lower in participants who were given P2Y12 inhibitor monotherapy as compared to standard DAPT (HR=0.53, 95% CI: 0.41-0.68, I<sup>2</sup> =30%, p-value <0.0001). Conversely, prescribing P2Y12 inhibitor monotherapy lead to an increased risk of major adverse cardiovascular outcomes (HR=0.95, 95% CI:0.83-1.10, I<sup>2</sup> =0) and ischemic stroke (HR=0.96, 95% CI:0.59-1.57, I<sup>2</sup> =42%) as opposed to DAPT.

**CONCLUSION:** In the light of the findings of this meta-analysis, we conclude that the incidence of bleeding decreases with P2Y12 inhibitor monotherapy as compared to standard DAPT. However, this is accompanied by an increase in thrombotic events such as stent thrombosis, major adverse cardiovascular outcomes and ischemic stroke.

**KEYWORDS:** Acute coronary syndrome, DAPT, P2Y12 inhibitors, PCI, TIMI bleeding, Major Adverse cardiovascular outcomes, Ischemic stroke.



## AWARENESS AND ATTITUDE TOWARDS BREAST CANCER AND MAMMOGRAPHY AMONG FEMALE MEDICAL STUDENTS IN TWIN CITIES OF PAKISTAN: A CROSS-SECTIONAL STUDY

**Presenter:** Zainab Jawad

**Authors:** Mehroz Mustafa, Zainab Jawad, Kanz Ul Eman Maryam, Aimen Zahra, Eleesha Shakeel, Danish Ali Ashraf

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Breast cancer is the most frequently arising malignant tumor in women. Its risk can be reduced with early screening by mammography. Female medical students should be aware of the disease risks and diagnostics for its effective prevention.

**OBJECTIVES:** To assess the knowledge and attitude towards breast cancer and mammography among the female medical students of the twin cities of Pakistan.

**METHODS:** A qualitative, cross-sectional study was conducted over a period of six months among the female medical students of three private and three government medical colleges in the twin cities of Pakistan. Data collection was mediated through an adapted online questionnaire after obtaining approval from the ERC of FUMC, containing questions about the knowledge, signs and symptoms of breast cancer and the importance of mammography. Descriptive and inferential statistical analysis was done using SPSS 26, with  $p < 0.05$  considered statistically significant.

**RESULTS:** Our study included 341 female medical students with an age range of 18 to 25 years (mean age  $20.71 \pm 1.539$ ) and 92.4% (315) of the participants recognized the history of breast cancer in first degree relatives as a risk factor. 78% (266) of the participants considered the use of oral contraceptives in women to pose a risk of breast cancer. 85% (290) of the participants considered inward pulling of the nipple as a sign of breast cancer. Only 33.4% (114) of the participants considered over 40 years of age as the best time to go for mammography. A Chi-square test revealed a significant difference in the responses from the students of clinical and preclinical years over the best time to go for mammography ( $p < 0.001$ ).

**CONCLUSION:** Our study reveals optimal knowledge about breast cancer among female medical students while underscoring the importance of continued education on mammography.

**KEYWORDS:** Breast Cancer, Mammography, Awareness, Attitude, Medical Students.

OP 27

**EVALUATION OF PERCEPTION AND AWARENESS OF ASTHMA IN THE PATIENTS VISITING OPD OF FAUJI FOUNDATION HOSPITAL RAWALPINDI; A CROSS SECTIONAL STUDY**

**Presenter:** Aleena Ahmed

**Authors:** Aleena Ahmed, Tehreem Fatima, Ifra Samee, Shalina Amir, Isra Nasarullah, Danish Ali Ashraf

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Asthma is a chronic lung disease caused by inflammation of the airways, making it harder to breathe. With proper treatment and lifestyle modifications, it can be easily managed.

**OBJECTIVES:** To assess the perception of the population regarding various symptoms, manifestations, and treatment of asthma. Moreover, our research explores whether different socio-economic backgrounds play a role in perceptions of asthma.

**METHODS:** A cross-sectional, quantitative study was conducted from February 2024 to July 2024 (6 months) in the OPD of Fauji Foundation Hospital after getting approval from ERC FUMC. The sample size was calculated using open epi with CI-95% using non-probability convenience sampling. Respondents were interviewed on a pre-structured, validated questionnaire. The data was categorized based on participants' scores using a Likert scale. All descriptive and inferential statistical tests, like ANOVA, were applied using SPSS 26. A p value < 0.05 was considered statistically significant.

**RESULTS:** A sample size of 111 patients (n = 36 males, n = 75 females) from FFH OPD with a mean age of 40.6 ± 15.8 years was analyzed. 77.5% (n = 86) of the participants strongly agreed that shortness of breath was a symptom of asthma. 48.6% (n = 54) strongly agreed that inhaler were a good treatment for asthma. 54% (n = 60) patients thought that people with asthma become addicted to inhalers. There was an association of socio-economic status with the misconception that people with asthma cannot engage in extreme physical activities (p value < 0.05) and that absence of asthma attacks means that you don't have asthma anymore (p value < 0.05).

**CONCLUSION:** Our research shows that most people have adequate awareness of symptoms of asthma as a chronic respiratory disease but have limited knowledge on misapprehensions regarding disease. There is a difference of opinions amongst socioeconomic groups regarding common misconceptions, as mentioned above, so awareness and educational programs are needed for better management of asthma in society.

**KEYWORDS:** Asthma, awareness, socioeconomic status, misconceptions.

OP 28

**ASSESSMENT OF THE KNOWLEDGE AND AWARENESS OF BREAST CANCER  
AND ATTITUDE TOWARDS BREAST SELF-EXAMINATION AMONG FEMALE  
PATIENTS VISITING GYNECOLOGY OPD OF FAUJI FOUNDATION HOSPITAL  
RAWALPINDI**

**Presenter:** Maheen Nawaz

**Authors:** Maheen Nawaz, Ahmed Ali Khan, Zainab Mansoor Aziz, Bakhtawar Mohsin Jami, Fareeha Kanwal, Hira Ashraf

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Breast Cancer is currently recognized as the most common type of cancer globally causing the second most cancer-related deaths. Awareness regarding the disease is crucial for its early detection, reducing mortality, and improving prognosis.

**OBJECTIVE:** This study aims to assess the knowledge and awareness regarding breast cancer and breast self-examination among females with no prior diagnosis of breast cancer.

**METHODS:** A quantitative cross-sectional study was conducted from February to August 2024. A sample size of n=144 was determined using RaoSoft. After IRB approval from Foundation University Medical College, data was collected from adult females over 18 with no prior breast cancer diagnosis, using a validated questionnaire and purposive sampling at Fauji Foundation Hospital's gynecology outpatient department. Data analysis was performed with IBM SPSS 26, using a p-value of <0.05 for statistical significance.

**RESULTS:** The study included 144 females aged 18 and above with a mean age of  $33.04 \pm 11.6$  years. Breast trauma (6.3%, n=9) and increasing age (5.6%, n=8) were the most noted risk factors, while lumps in the breast or armpit were the most common symptom (7.6%, n=11). Nearly half (49.3%, n=71) believed screening should start after age 35. Most participants (68.1%, n=98) had heard of BSE, but only 45.1% (n=65) practiced it. Over half (56.9%, n=82) agreed that learning BSE is important. Educational status significantly correlated with BSE awareness and practice ( $p < 0.05$ ), but family history and age showed no significant association with BSE attitude ( $p > 0.05$ ).

**CONCLUSION:** While most participants recognized the importance of breast self-examination, few practiced it. Educational status significantly affected BSE awareness and practice, highlighting the need for targeted education to boost early detection and outcomes.

**KEY WORDS:** Breast Cancer, Breast Self-Examination, Females, Adult

## EXPLORING THE IMPACT OF CATIONIC SURFACTANT CTAB ON BLEU BRILLIANT G 250 DE COSMASSIE: IMPLICATIONS FOR HEALTH MANAGEMENT AND ENVIRONMENTAL SUSTAINABILITY

**Presenter:** Muhammad Hasnat Akhtar

**Authors:** Asma Naz, Muhammad Hasnat Akhtar, Waheed Ul Hassan, Fatima Ashraf, Syed Waqas Bukhari, Muhammad Qaiser, Hafiz Muhammad Usman Abid, Farah Akhter, Muhammad Saleem Qureshi, Abdul Aziz

**Affiliation:** CMH Kharian Medical College

**BACKGROUND:** Surfactants are ubiquitous in both natural and industrial processes due to their unique ability to reduce surface tension and facilitate interactions between hydrophilic and hydrophobic substances. Cationic surfactants like cetyltrimethylammonium bromide (CTAB) are of particular interest because of their widespread applications in areas such as healthcare and environmental management. The interaction between surfactants and dyes, such as Bleu Brilliant G 250 de Cosmassie, is critical in industrial processes, especially in the textile industry where wastewater treatment poses significant environmental challenges.

**OBJECTIVE:** The aim of this study was to explore the thermodynamic behavior of CTAB when combined with Bleu Brilliant G 250 de Cosmassie in aqueous solutions at room temperature. It sought to determine the critical micelle concentration (CMC) and the degree of counter-ion dissociation ( $\alpha$ ), and to calculate the changes in Gibbs free energy ( $\Delta G_m$ ), enthalpy ( $\Delta H_m$ ), and entropy ( $\Delta S_m$ ) of the system.

**METHODS:** The study employed conductometric and spectrophotometric techniques to analyze the CTAB-dye interactions. Solutions were prepared with varying concentrations of CTAB and Bleu Brilliant G 250 de Cosmassie in deionized water, ensuring solvent purity through stringent conductivity and pH monitoring. Electrical conductance was measured at different temperatures to determine the CMC, while absorbance spectra were recorded to observe changes in the interaction between the surfactant and dye. The degree of counter-ion dissociation was calculated by the slope ratio method, and thermodynamic parameters were computed using established equations.

**RESULTS:** The conductometric studies revealed an increase in CMC with temperature, indicating a stabilization of surfactant monomers at higher temperatures. For CTAB and Bleu Brilliant system 1, the CMC was found to be 0.8 with  $\alpha$  valued at 0.83. For system 2, the CMC values were 1.55 and 1.6 with  $\alpha$  values of 1.01 and 0.91, respectively. Thermodynamically, the system displayed a Gibbs free energy of

micellization of  $-33.09$  KJ/mol, an enthalpy change of  $-6.53$ , and an entropy change of  $0.1325$  JK<sup>-1</sup> mol<sup>-1</sup>.

**CONCLUSION:** The study concluded that the interaction between CTAB and Bleu Brilliant G 250 de Cosmassie is influenced significantly by temperature, which affects the micellization behavior and thermodynamic properties.

**KEYWORDS:** CTAB, Critical Micelle Concentration, Thermodynamics, Surfactant-Dye Interaction

## THE EVALUATION OF EARLY PROGNOSTIC FACTORS OF MORTALITY IN PATIENTS WITH ACUTE PANCREATITIS AT HOLY FAMILY HOSPITAL RAWALPINDI; A PROSPECTIVE COHORT STUDY

**Presenter:** Faizan Shahzad

**Authors:** Faizan Shahzad, Zara Ahsan, Areeba Ahsan, Usama Shahid

**Affiliation** Rawalpindi Medical University

**BACKGROUND:** Acute pancreatitis is characterized by sudden inflammation of the pancreas, commonly triggered by gallstones, alcohol consumption, or systemic diseases. While the overall mortality rate is between 2% and 5%, it can escalate to 30% to 50% in severe cases. Elevated laboratory values in high-risk patients can play a prognostic role in determining the risk of mortality.

**OBJECTIVE:** The main aim of this study was to assess the factors that can predict mortality at an early stage in patients with acute pancreatitis.

**METHODS:** A prospective cohort study was conducted at the Holy Family Hospital (October 2023 to July 2024) with the sample size determined using MEDCALC to ensure 95% confidence interval. Data was collected via a validated questionnaire, employing non-probability convenience sampling after receiving ethical approval from IRB RMU. This study included all acute pancreatitis patients excluding those with malignant biliary or pancreatic diseases, no pancreatic infection, or immunodeficiency. Prognostic factors were analyzed using T-test, chi-square test, multivariate regression, and ROC curve analysis with IBM SPSS 27 and a significance level of  $p\text{-value} < 0.05$

**RESULTS:** Our study included 161 patients (60.2% males, 39.8% females) with a mean age of  $55.16 \pm 7.98$ . Multivariate analysis identified creatinine levels (RR= 3.411, 95% CI= 1.032-11.177,  $p= 0.44$ ), neutrophil-lymphocyte ratio (NLR) (RR=1.559, 95% CI= 1.149-2.116,  $p= 0.004$ ), and red cell distribution width (RDW) (RR=1.947, 95% CI= 1.338-2.832,  $p < 0.0001$ ) as key predictors of mortality. Moreover, ROC curve analysis showed the areas under the curve (AUC) to be 0.747, 0.857, and 0.864 with  $p < 0.0001$  for creatinine, NLR, and RDW respectively. Among these, RDW had the highest specificity (93.7%) while NLR had the highest sensitivity (78.9%)

**CONCLUSION:** Our results suggested that lab indicators RDW, creatinine, and NLR levels examined at hospital admission were associated with acute pancreatitis mortality.

**KEYWORDS:** Acute Pancreatitis, Mortality, Prognosis, Prospective Cohort

OP 31

## EFFECT OF SLEEP QUALITY ON PHYSICAL, MENTAL, AND EMOTIONAL HEALTH OF STUDENTS OF PRIVATE MEDICAL COLLEGE; A CROSS-SECTIONAL STUDY

**Presenter:** Momina Zafar

**Authors:** Momina Zafar, M. Tanveer Naveed Qazi, Samman Rasheed, Momna Amjad, Ayesha Akbar, Laiba Zaheer, Aun Muhammad Alvi, Nauman Raza, Areej Fatima, Ayesha Amir

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Sleep quality, a critical aspect of overall health, significantly influences physical, mental, and emotional well-being. Medical students often experience poor sleep due to academic pressures, extended hours, and high stress.

**OBJECTIVES:** This study investigates the prevalence of inadequate sleep among medical students and examines its impact on their physical, mental, and emotional health. It also compares sleep quality and health outcomes across different academic years and between day-scholars and hostelites.

**METHODS:** A cross-sectional analytical study was conducted with 260 MBBS students from Foundation University Medical College, Islamabad, using stratified random sampling from March to August 2024. Ethical approval was granted by the Ethical Review Committee of Foundation University School of Health Sciences. Data were collected through an online questionnaire with the Students' Affair Department's permission. Sleep quality was assessed using the Pittsburgh Sleep Quality Index, while physical, mental, and emotional health were evaluated through BMI and Physical Health Questionnaire, Perceived Stress Scale, and Copenhagen Burnout Inventory, respectively.

**RESULTS:** The study revealed a high prevalence of poor sleep quality among students. Sleep quality was positively correlated with physical health ( $r=.10$ ,  $p>.05$ ), mental health ( $r=.35$ ,  $p<.05$ ), and emotional health ( $r=.30$ ,  $p<.05$ ). Hostelites reported better sleep quality ( $M=24.34$ ,  $SD=7.36$ ) compared to day-scholars ( $M=23.23$ ,  $SD=7.30$ ). Significant differences in sleep quality were observed between ( $M=36.53$ ) and within ( $M=54.20$ ) academic years.

**CONCLUSION:** The findings emphasize the significant impact of sleep quality on the physical, mental, and emotional well-being of medical students. Variations across academic years and residential status are notable. Integrating sleep management and counseling into medical education is recommended to enhance student health and academic performance.

**KEYWORDS:** Sleep Quality, Physical Health, Mental Health, Emotional Health, Medical Students



OP 32

## EXPLORING SUICIDE LITERACY AND HELP-SEEKING BEHAVIORS IN PAKISTANI UNDERGRADUATES: A CROSS-SECTIONAL STUDY

**Presenter:** Asad ur Rab

**Authors:** Asad ur Rab, Mehr Fatima, Hadiya Ahsan Khan, Areesha Khan, Ayemah Abbasi

**Affiliation:** Foundation University School of Health Sciences, Foundation University Islamabad

**BACKGROUND:** Suicide takes a staggering toll on global public health. The reported suicide rates in South Asia are high compared to the global average, but there is insufficient reliable data. This gap in data and understanding underscores the importance of addressing suicide literacy, ideation, and attitudes toward seeking psychological help among undergraduate students.

**OBJECTIVES:** This study analyzes suicide literacy, ideation, and attitudes towards seeking professional help, comparing these factors among Pakistani undergraduates across various majors.

**METHODS:** A cross-sectional study was conducted over a period of six months. It included 164 students from various undergraduate universities in Pakistan. The sampling technique used was non-probability convenience sampling. A Google Forms-based questionnaire was disseminated among social media groups and through personal contacts among students belonging to the institutions. The inclusion criteria was people currently enrolled in undergraduate programs in higher education institutes across Pakistan. Students already suffering from mental illnesses were excluded. The collected data was analyzed using SPSS Statistics Version 26.

**RESULTS:** The data consisted of 164 participants, with 112 (68.3%) being female and 52 (31.7%) male. All participants were undergraduate students from various fields, broadly categorized into medical sciences ( $n = 75$  [45.7%]) and non-biomedical sciences ( $n = 89$  [54.3%]), with ages ranging from 17 to 24 years (mean =  $20.4 \pm 4.00$ ). Results indicated that females are more suicide-literate compared to males ( $p = 0.020$ ). Comparatively, non-biomedical undergraduate students demonstrated a higher level of suicide ideation ( $p = 0.004$ ), while attitudes toward psychological help-seeking were more favorable among biomedical undergraduate students ( $p = 0.004$ ).

**CONCLUSION:** The statistically significant low levels of suicide literacy in males and the elevated levels of suicide ideation in non-biomedical students, along with their increased suicidality, emphasize the need for targeted campaigns to boost suicide literacy and help-seeking attitudes. This can, in the future, ensure more positive outcomes for students struggling with their mental health.

**KEYWORDS:** Literacy, Mental Health, Students, Help-Seeking Behavior, Cross-Sectional Studies

OP 33

**CROSS SECTIONAL STUDY ON TB AWARENESS AND PREVENTION IN ALLIED HOSPITALS OF RAWALPINDI**

**Presenter:** Saira Azhar

**Authors:** Sumia Fatima, Maryam Mansoor, Zainab Idrees, Tayyaba Idrees, Mahin Fatima, Ayesha Zulfiqar, Abdur Rehman, Ahmed Hassan, Saad Asif , Tehseen Haider, Faizan Shahzad

**Affiliation:** Rawalpindi Medical University

**BACKGROUND:** Tuberculosis is a widespread disease that affects millions of people and ranks as the second leading cause of death by an infectious disease. TB is a contagious disease that is caused by the bacteria *Mycobacterium tuberculosis*. Ending the TB epidemic by 2030 is one of the sustainable development goals and countries with high prevalence rates are not on track to meet these goals.

**OBJECTIVES:** To determine the level of knowledge of general public towards tuberculosis and to assess the attitude and practice of general population towards prevention of tuberculosis

**METHODS:** A descriptive cross-sectional survey based study was conducted in the Allied hospitals of Rawalpindi medical university during March 2022. Non-random consecutive sampling technique was used. People were interviewed. A standardized self-structured questionnaire was used. Data collected was analyzed using the latest version of SPSS.

**RESULTS:** A total of 296 people were interviewed. Out of the total population, 109(36.8%) respondents knew that tuberculosis is a bacterial disease. 23(7.8%) Respondents have no definite knowledge about the prevention of Tuberculosis. 282(95.3%) were willing to visit a hospital if they developed Tuberculosis.

**CONCLUSION:** The study suggests that we have come a long way in prevention and treatment of TB but we still have many more miles to go. It implies the urgent need to amplify the efforts to further improve the awareness of the populace about the symptoms and prevention of the disease. An increase in monitoring the vaccination program is needed, to ensure prevention of TB at grassroots level.

**KEYWORDS:** Tuberculosis, Awareness, Prevention

## EFFICACY AND OUTCOMES OF BEMPEDOIC ACID VERSUS PLACEBO IN HYPERCHOLESTEREMIC PATIENTS WITH STATIN-INTOLERANCE: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

**Presenter:** Muhammad Daoud Tariq

**Author:** Muhammad Daoud Tariq

**Affiliation;** Foundation University School of Health Sciences, Foundation University Islamabad

**BACKGROUND:** Bempedoic acid (BA) has shown significant progress in reducing cholesterol levels and is relatively free from the many side effects encountered with the use of other hyperlipidemic drugs such as statins. However, its efficacy in patients with statin intolerance is controversial with inconsistent results among studies.

**OBJECTIVE:** To determine the Efficacy and Outcomes of Bempedoic Acid Versus Placebo in Hypercholesteremic Patients with Statin-Intolerance.

**METHODS:** An electronic literature search was performed using various databases such as Medline, Google Scholar, and the International Registry of Clinical Trials. The least-square mean (LSM) percent change for assessing changes in lipid parameter levels from the baseline and the risk ratio (RR) were used for the evaluation of binary endpoints, with statistical significance set at  $p < 0.05$ . Random-effects meta-analyses were performed for all the outcomes.

**RESULTS:** This analysis, which included five randomized controlled trials (RCTs) with a total of 18,848 participants, found that BA significantly reduced LDL-C [LSM difference in %: -25.24; 95% CI: -30.79 to -19.69;  $p < 0.00001$ ], total cholesterol [LSM difference in %: -21.28; 95% CI: -30.58 to -11.98;  $p < 0.00001$ ], non-HDL-C [LSM difference in %: -23.27; 95% CI: -29.80 to -16.73;  $p < 0.00001$ ], and HDL-C [LSM difference in %: -3.37; 95% CI: -3.73 to -3.01;  $p < 0.00001$ ] compared to placebo. Clinically, BA was associated with a significantly reduced risk of coronary revascularization [RR: 0.81; 95% CI: 0.66 to 0.99;  $p = 0.04$ ], hospitalization for unstable angina [RR: 0.67; 95% CI: 0.50 to 0.88;  $p = 0.005$ ], and myocardial infarction [RR: 0.76; 95% CI: 0.66 to 0.88;  $p = 0.0004$ ]. No significant differences were observed in MACE [RR: 0.81;  $p = 0.15$ ], ACM [RR: 0.86;  $p = 0.46$ ], cardiovascular-related mortality [RR: 0.79;  $p = 0.44$ ], or stroke [RR: 0.83;  $p = 0.08$ ] between the two groups. Regarding safety, BA-treated patients had a lower risk of myalgia [RR: 0.80;  $p = 0.0002$ ] but a higher risk of gout [RR: 1.46;  $p < 0.0001$ ] and hyperuricemia [RR: 1.93;  $p < 0.00001$ ] compared to placebo.

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**CONCLUSION:** Our analysis demonstrated that BA significantly reduced the levels of LDL-C, total cholesterol, non-HDL-C, HDL-C, ApoB, and hs-CRP compared with the placebo group. Additionally, patients who received BA had a lower likelihood of coronary revascularization and hospitalization due to unstable angina, MI, and myalgia.

**KEYWORDS:** Bempedoic acid, cardiovascular outcomes, Hypercholesterolemia, Meta-analysis, Statin intolerance

OP 35

**EXAMINING CORRELATES OF FIVE FACTOR MODEL PERSONALITY TRAITS OF FUTURE SPECIALISTS AND THEIR SPECIALTY PREFERENCES: A CROSS SECTIONAL STUDY**

**Presenter:** Fizza Nouman

**Authors:** Fizza Nouman, Dr. Tahira Amjad, Malaika Nasir, Abdur Rahim, Maimoona Yousaf, Malaika Abid, Abdullah Inayat Gondal, Abdullah Waheed Chaudhry

**Affiliation:** Foundation University Medical College, Foundation University Islamabad.

**BACKGROUND:** Personality traits influence specialty choices of future physicians. The Five Factor Model (FFM) assesses traits of extraversion, conscientiousness, openness to experience, agreeableness, and neuroticism, which guide these decisions. Understanding these traits is essential for a balanced physician distribution and improving training and selection processes.

**OBJECTIVES:** To assess personality traits of medical students and house officers using the FFM, identify their future specialty preferences and determine whether any correlation exists between them.

**METHODS:** A cross-sectional analytical study was conducted among Fourth and Final Year MBBS students and house officers at a tertiary care hospital in Rawalpindi, Pakistan. A self-administered questionnaire covering demographic information, future specialty preferences and personality traits (assessed using the Big Five Inventory–2 Extra-Short Form) was used for data collection (Cronbach Alpha = 0.74). Descriptive and inferential data analysis was performed using SPSS version 23, with a significance level at 0.05.

**RESULTS:** The study included 230 respondents, with 81(35.2%) males, 149 (64.8%) females and a mean age of  $23\pm 1.5$  years. Mean Agreeableness score was highest ( $10.97\pm 2.26$ ), and Neuroticism was lowest ( $8.70\pm 2.49$ ). Females scored higher in both traits. Respondents scoring higher in Agreeableness expressed intent to pursue further post-graduate qualifications ( $p=0.028$ ). Many respondents had preferences for more than one specialty. Surgery ( $n=75$ ) and internal medicine ( $n=50$ ) were the most preferred specialties. Extraversion scores were significantly higher among those preferring surgery ( $p=0.014$ ), while radiology was linked to lower extraversion ( $p=0.027$ ). Pediatrics was linked to higher neuroticism ( $p=0.028$ ) while family medicine was linked to lower neuroticism ( $p=0.05$ ). Emergency medicine ( $p=0.018$ ) and ophthalmology ( $p=0.05$ ) preferences were marked by higher agreeableness scores.

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**CONCLUSION:** This study highlights notable differences in personality traits across genders and some clinical specialties. Understanding this interplay is vital for medical education and career planning and can contribute to the development of a more balanced and fulfilled healthcare workforce.

**KEYWORDS:** Big-Five Inventory, Personality traits, Specialty preferences, Healthcare workforce

OP 36

**BEYOND THE NORM: ASSESSING PROSTATE CANCER AWARENESS AND SCREENING PRACTICES IN PAKISTANI MEN AGED 40 AND ABOVE WITH AFFECTED FIRST-DEGREE RELATIVES, EMPLOYED AT A PRIVATE ORGANIZATION**

**Presenter:** Sadia Tameez-ud-Din

**Authors:** Asfa Turab, Sadia Tameez-Ud-Din, Fatima Iftikhar, Muhammad Shoaib Ashraf, Tehreem Zahra, Ali Hassan

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Prostate cancer is the second most common cancer in men worldwide. In Pakistan, awareness and screening are particularly limited among high-risk men with affected first-degree relatives. Assessing their awareness and screening behaviors is crucial to identifying gaps, developing targeted interventions, and ultimately improving early detection and reducing mortality rates in this vulnerable group.

**OBJECTIVES:** This study assesses prostate cancer awareness, family history, and screening practices among male staff aged 40+ in an Islamabad private organization, explores perceived barriers and facilitators, and determines any association between them.

**METHODS:** A Cross-sectional analytical study was conducted from March to August 2024, on a population sample including all employees. After Ethical approval and consent, data was collected through a questionnaire with good reliability (Cronbach's Alpha 0.888). Responses were recorded via in person interview on Google forms. SPSS version 26 was employed for descriptive and inferential statistical analysis.

**RESULTS:** A total of 156 participants of age ranging from 40-60 years with mean age  $49.81 \pm 5.61$  years. Secondary Education was completed by 62(39.74%). Permanent employees were 100(64.10%). Participants with Inadequate awareness were 125(80.15%), prostate cancer screening information from friends and family 143(91.7%) and health care professionals 139 (89.1%) and 5(3.2%) had first degree relatives with prostate cancer (fathers). Positive family history was found in 4 (2.6%). Only 7 (4.5%) participants underwent prostate screening once yearly while the rest of 149 (95.5%) never underwent any prostate screening primarily because of lack of awareness (64.1%) and expenses (61.5%). Notably, 99(63.5%) recommended awareness campaigns and 91 (58.3%) organizational support for screening. No significant association was found between prostate cancer awareness level with education, positive family history and screening practices.



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**CONCLUSION:** Majority of men did not have adequate awareness of Prostate Cancer screening and had low screening practices. Awareness campaigns and organizational support were perceived as the main facilitators.

**KEY WORDS:** Awareness, First Degree Relatives, Prostate cancer, Screening, PSA

## NOISE-INDUCED HEARING LOSS IN A CONNECTED WORLD: EXPLORING THE CONSEQUENCES OF EARBUD DEPENDENCY ON MEDICAL STUDENT'S HEARING

**Presenter:** Rikza Mubeen

**Authors:** Rikza Mubeen<sup>1</sup>, Hassan Raza<sup>2</sup>, Ali Sanan<sup>1</sup>, Aatir Aslam<sup>1</sup>, Usama Khalil Janjua<sup>1</sup>, Kshaf Mazhar<sup>2</sup>, Nosheen Zaidi<sup>1</sup>

**Affiliation:** <sup>1</sup> Foundation University Medical College, Foundation University Islamabad, <sup>2</sup>Federal Medical and Dental College

**BACKGROUND:** The physiological prodigy of hearing, deftly steered by the intricate mechanisms of the cochlea and auditory nerve, serves as the superheroes of your body, transforming waves into the vibrant areas of life's melodies, blending the rhythms of communication, spatial cognition, and the enthralling echoes of the boundless acoustic cosmos.

**OBJECTIVES:** This cross-sectional quantitative overview examines the predominance and physiognomies of the propensity for paying attention to headphones for broadened periods without breaks among clinical understudies. This study aims to discern how many of the students' using earbuds have developed hearing impairment, and are aware of the fact that this is damaging their precious sense of hearing.

**METHODS:** A total of 234 ears were assessed for hearing ability using the "Hearing Test" app, which played pure tones in each ear sequentially, generating individual audiograms. A sound meter monitored ambient noise, ensuring it stayed within 30 dB-40dB. Furthermore, participants completed a questionnaire to gauge their awareness of the risks associated with prolonged earbud use. This dual approach combined objective hearing tests with subjective awareness insights to provide a comprehensive view of earbud usage impacts.

**RESULTS:** Analysis of the study revealed that about 10.3% of participants presented mild NIHL in the right ear, and 22.2% had mild NIHL in the left ear. Moreover, NIHL was observed in a greater population at a frequency of 15 dB in the right ear while 9, 11, and 21 dB in the left ear. The significant association between NIHL in the right ear and high-volume listening ( $p < 0.05$ ) highlights the detrimental impact of listening habits. Conversely, no significant association was found between the duration of device use and NIHL in either ear.

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**CONCLUSION:** This cross-sectional survey has unveiled various aspects of earbud dependency among which hearing loss is a major one. However, there is a need to conduct longitudinal studies for further assessment of the disastrous damage caused by this technology.

**KEYWORDS:** Earbud usage, Hearing loss, Audiogram, NIHL, Noise cancellation

OP 38

**PREVALENCE, TRIGGERS, AND SELF-MEDICATION PRACTICES FOR MIGRAINES AND TENSION-TYPE HEADACHES AMONG MEDICAL AND NON-MEDICAL UNDERGRADUATE STUDENTS: A CROSS-SECTIONAL STUDY**

**Presenter:** Anfaal Fatima

**Authors:** Asad Ur Rab, Anfaal Fatima, Nibras Irfan, Ahmed Ashraf, Danial Ahsan

**Affiliation:** Foundation University School of Health Sciences, Foundation University Islamabad

**BACKGROUND:** Headaches are a common neurological disorder, notably prevalent among university students compared to other groups. They can significantly affect academic performance and the overall well-being of students. Understanding the frequency and impact of headaches in this demographic is essential for developing effective support strategies.

**OBJECTIVES:** This study aims to evaluate the frequency of migraine and tension-type headaches among medical and non-medical students, identify common triggers and psychological factors, and determine the percentage of students who seek medical consultation or self-medicate after experiencing headaches.

**METHODS:** An online, questionnaire-based cross-sectional study was conducted among medical and non-medical students from Islamabad, Rawalpindi and Lahore, Pakistan. Of the 133 participants, only those who had experienced headaches in the past three months were included; those with chronic headaches were excluded. Headaches were classified according to the International Classification of Headache Disorders-III (ICHD-3). Informed consent was obtained after explaining the study's purpose. The data analysis was carried out using SPSS 26.

**RESULTS:** Out of 133 participants (74% medical, 26% non-medical), aged 18–25 years [mean = 20.5y, SD ± 1.3], 73% reported headaches in the past three months. Of those who reported headaches, 27% had migraines with aura, 34% without aura, and 39% had tension-type headaches? Commonly identified triggers included lack of sleep (60%), excessive screen use (52%), stress (61%), and a depressed mood. Only 17% sought medical consultation, 31% used analgesics (71% self-medicated), and 30% used non-medicinal methods like spiritual remedies. No significant link was found between headache frequency and type of degree [ $p = 0.57$ ].

**CONCLUSIONS:** There is a high percentage of students regularly experiencing headaches. Low medical consultation rates and high rates of self-medication highlight a need for better management and support strategies to promote student well-being.

**KEYWORDS:** headaches, migraine, tension-type headache, prevalence, cross-sectional study

OP 39

## KNOWLEDGE AND PERCEPTION OF PATIENTS REGARDING USE OF ARTIFICIAL INTELLIGENCE IN HEALTHCARE: A CROSS-SECTIONAL STUDY

**Presenter:** Fariha Sadia Nasir

**Authors:** Mohammad Aniq Zahoor Baig, Fariha Sadia Nasir, Muhammad Aatir Aslam, Ali Sanan, Usama Khalil Janjua

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** AI is changing healthcare by expanding diagnostics and treatment effectiveness. In Pakistan, it aims to target healthcare challenges, however, ethical integration along with effective implementation depend on patient trust and understanding.

**OBJECTIVES:** This study aims to gain important insights into patient knowledge and attitudes to guide the ethical and effective implementation of AI in Pakistani healthcare.

**METHODS:** From May to June 2024, we conducted a cross-sectional study at Fauji Foundation Hospital Rawalpindi using an online questionnaire on Google Forms that was self-administered. Participants included outpatients, and their companions, recruited from the outpatient clinics of the Eye, ENT, and Medicine departments. The acquired data was exported to an Excel sheet and analyzed using SPSS 23, with statistical significance set at  $p < 0.05$  using the Chi-square test.

**RESULTS:** A total of 151 responses were collected and included in the analysis and two were excluded. Most patients believed that AI would make health care much better (22.8%) or somewhat better (32.9%), whereas some believed AI would make health care somewhat worse (7.4%) or much worse (4.0%); 12.8% indicated they did not know. The usage of technical devices was high among the respondents. Smartphones used were at 84.6%, online shopping websites 8.6%, mobile banking 3.4% and none of these were in use by 5.4% of the respondents. Respondents expressed concerns about the security of their personal information, reduced time with clinicians, and the potential for misdiagnosis.

**CONCLUSION:** The study shows optimism about AI's potential to improve healthcare along with a high smartphone usage, though concerns about data security, reduced clinician interaction, and misdiagnosis remain.

**KEYWORDS:** Artificial Intelligence, Patients, Attitude, Perception, Survey Questionnaires

OP 40

**ROLE OF NICORANDIL IN PREVENTING CONTRAST-INDUCED NEPHROPATHY IN PATIENTS UNDERGOING CARDIAC CATHETERIZATION PROCEDURES: AN UPDATED SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS**

**Presenter:** Ahmed Ali Khan

**Authors:** Ahmed Ali Khan. Muhammad Zubair Tahir. Kanz Ul Eman Maryam ,Muhammad Uzair, Haram Rehman, Zainab, Amna Abdullah, Ahmed Anwer, Danish Ali Ashraf, Sidrah Rahim

**Affiliation :** Faisalabad Medical University, Foundation University Medical College, Foundation University Islamabad, Ziauddin Medical College, Rehman Medical College, Allama Iqbal Medical College Sheikhupura, Amna Inayat Medical College, Jinnah Medical and Dental College, King Edward Medical University

**BACKGROUND:** Contrast-induced nephropathy (CIN) is a major risk for patients undergoing coronary angiography (CAG) or percutaneous coronary intervention (PCI). This study explored the efficacy and safety of nicorandil administration in patients undergoing such procedures.

**METHODS:** PubMed, MEDLINE, Embase, Google Scholar, and Web of Science were searched through May 2024 for RCTs on nicorandil post-CAG or PCI. Outcomes of interest included CIN incidence, major adverse events, and renal function markers. Risk ratios with 95% CIs were computed using a random effects model, with publication bias assessed using Begg's test and risk of bias using the Cochrane RoB2 tool. GRADE approach was used for certainty of evidence assessment.

**RESULTS:** 12 potentially relevant studies (n = 2190 patients) were included in the final analysis out of the 103 articles from the initial search. Patients receiving nicorandil demonstrated a significant reduction in the incidence of CIN (RR 0.40 [0.31, 0.52], p < 0.00001; I2: 0%) which was consistent for oral and IV routes of administration. Subgroup differences observed in terms of comparative efficacy between both routes was not significant (p-interaction = 0.22). Treatment with oral nicorandil reduced the risk of major adverse events (RR 0.71 [0.51, 0.99], P = 0.05; I2 = 0%). Serum creatinine levels were significantly lower 24h (SMD -0.20 [-0.40, -0.01], p = 0.05; I2: 52%), 48h (SMD -0.26 [-0.45, -0.07], p = 0.006; I2: 78%), and 72h post-intervention (SMD -0.24 [-0.48, -0.01], p = 0.04; I2: 75%) among patients on nicorandil. Similar results were observed for serum Cystatin C levels 48h post-intervention (SMD -0.43 [-0.78, -0.08], p = 0.02; I2: 90%) with no significant changes observed at 24h post-intervention.

**CONCLUSION:** Nicorandil reduces CIN incidence in CAG and PCI patients, increases renal clearance of creatinine and cystatin C, without significantly affecting eGFR. Larger, long-term trials are needed to ascertain its reno-protective effects.

**KEYWORDS:** Humans; Nicorandil; Coronary Angiography; Percutaneous Coronary Intervention; Creatinine; Cystatin C

OP 41

**COMPARISON OF FEAR OF FAILURE AMONG MEDICAL VS NON-MEDICAL STUDENTS OF RAWALPINDI, PAKISTAN**

**Presenter:** Arooj Basit

**Authors:** Ayesha Omer, Alieha Nasir, Tamania Akram, Arooj Basit, Ammar Yassir

**Affiliation:** Foundation University School of Health Sciences, Foundation University Islamabad

**BACKGROUND:** Atychiphobia, an intense fear of failure, can lead to avoidance of situations where failure is possible, with symptoms ranging from difficulty in breathing to paralysis..

**OBJECTIVES:** To compare level of atychiphobia in medical vs non-medical students and also to find association between year of study, gender and field of study of students with atychiphobia.

**METHODS:** A cross-sectional study of 331 students compared 165 medical students from FUMC and 166 non-medical students from FURC using a self-administered questionnaire. All consenting MBBS students from 1st to 5th year at FUMC were included, excluding those with psychological issues. The study found a p-value of 0.05 when comparing medical and non-medical students, using PFAI and t-tests to identify associations with atychiphobia.

**RESULTS:** The study included 331 students, with 136 (56 medical and 80 non-medical) showing the least fear of failure, 167 (91 medical and 76 non-medical) showing more fear, and 28 (18 medical and 10 non-medical) showing the most fear. The fear of failure in medical students turned out to be  $37.2242 \pm 7.36865$  and in non-medical students it was  $33.3554 \pm 8.33904$  with a t-value of 4.472. The PFAI test found no significant difference in atychiphobia between medical and non-medical students ( $p=0.057$ ). ANOVA results supported this with an F-value of 1.917 and  $p=0.107$ . An independent t-test also showed no significant difference in fear of failure between male and female students ( $p=0.062$ ).

**CONCLUSION:** The analysis shows that fear of failure is not significantly influenced by gender, year of study, or academic field.

**KEYWORDS:** Mental health, Fear, Students, Academic performance



## A COMPARATIVE ANALYSIS OF STUDY HABITS AND TECHNIQUES AMONG MEDICAL AND DENTAL STUDENTS OF WMDC

**Presenter:** Daim Idrees

**Authors:** Midha Zahid, Mashail Anees, Maryam Riaz, Minahil Rasheed, Misha Malik, Daim Idrees

**Affiliation:** Watim Medical and Dental College

**BACKGROUND:** Effective study habits and techniques are vital for medical students in mastering complex information and achieving academic success. Understanding which techniques yield the best outcomes can help students enhance their performance and retention of medical knowledge.

**OBJECTIVES:** This study aims to identify various study habits and techniques used by medical students and to compare their effectiveness in enhancing learning and academic performance.

**METHOD:** A cross-sectional study was conducted over six months at Watim Medical and Dental College, involving 300 medical and dental students. Data were collected through a digital questionnaire and an on-ground survey. Statistical analysis was performed using SPSS.

**RESULTS:** Among the 4th-year MBBS students surveyed, 69% were female, with 42.3% identifying their performance as average. A majority (57%) preferred reading/writing as their learning style, and 46.7% used task outlining. Flashcards were employed by 55.7% for active recall, while 70.7% favored summarizing notes. Spaced repetition was used by 82%, mnemonics by 87.7%, and interleaving by 52.7%. Though 43% used the Feynman technique, only 40% found it effective. The Pomodoro technique was practiced by 40.3%. These findings reflect the diverse strategies adopted by students for optimizing their study efforts.

**CONCLUSION:** The study concludes that medical and dental students use a wide variety of study habits and techniques, with traditional methods like reading/writing and task outlining being common. Active recall strategies, such as using flashcards and summarizing notes, were widely favored. Spaced repetition and mnemonics emerged as the most effective tools for long-term memory retention. Though less commonly used, techniques like the Feynman and Pomodoro methods were still valuable in providing structured approaches to studying. Overall, personalized study strategies are crucial for optimizing learning outcomes.

**KEYWORDS:** Study habits, study techniques, medical education, academic performance, study efforts

OP 43

**ASSESSMENT OF MORTALITY TRENDS RELATED TO POSTOPERATIVE RESPIRATORY DISORDERS IN THE US FROM 1999 TO 2020 USING CDC WONDER DATABASE**

**Presenter:** Danish Ali Ashraf

**Authors:** Danish Ali Ashraf <sup>1</sup>, Muzamil Akhtar <sup>2</sup>, Shehar Bano <sup>3</sup>, Farooq Kamran <sup>1</sup>, Asher Tariq <sup>1</sup>, Aleena Ahmad <sup>1</sup>, Eesha Noor <sup>1</sup>

**Affiliation:** <sup>1</sup>Foundation University Medical College, Foundation University Islamabad, <sup>2</sup>Gujranwala Medical College Gujranwala, <sup>3</sup>Advent health Tampa FI USA

**BACKGROUND:** Despite being a critical area of concern, mortality trends for postoperative respiratory disorders have not been thoroughly investigated in the United States.

**OBJECTIVES:** This study aims to assess trends and regional differences in deaths related to postoperative respiratory disorders across the nation.

**METHODS:** We analyzed death certificates from the CDC WONDER database from 1999 to 2020, focusing on postoperative respiratory disorder-related mortality. Crude and age-adjusted mortality rates (AAMRs) per 100,000 people were calculated by year, sex, race, region, place of death, and urbanization level. Annual percentage change (APC) and 95% confidence intervals (CI) were determined using the Joinpoint regression program.

**RESULTS:** From 1999 to 2020, there were 45,828 deaths related to postoperative respiratory disorders. The AAMR decreased from 1.06 in 1999 to 0.33 in 2020, with an average annual percentage change (AAPC) of -5.55 (95% CI, -5.96 - -4.98). Males had higher AAMRs (0.8) compared to females (0.5). Blacks consistently exhibited the highest AAMRs, while Asians had the lowest. Non-metropolitan areas had higher AAMRs (0.75 [95% CI, 0.74 to 0.77]) than metropolitan areas. State disparities were notable, ranging from 0.26 (95% CI, 0.23 to 0.28) in Massachusetts to 0.98 (95% CI, 0.89 to 1.07) in New Mexico.

**CONCLUSIONS:** Postoperative respiratory disorder-related mortality declined significantly from 1999 to 2020, likely due to improved management and technological advancements. Despite this decline, significant disparities persist, highlighting the need to address the underlying causes to ensure equitable medical care nationwide.

**KEYWORDS:** Postoperative Respiratory disorders, Postoperative Pulmonary complications, CDC WONDER, Mortality trends

OP 44

**ASSOCIATION BETWEEN MATERNAL ANTIPSYCHOTIC USE DURING PREGNANCY AND NEURODEVELOPMENTAL DISORDERS IN THE NEONATE: A SYSTEMATIC REVIEW AND META-ANALYSIS**

**Presenter:** Farooq Kamran

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**BACKGROUND:** Little is known about the possibility of neurodevelopmental teratogenicity in the fetus with the maternal use of antipsychotics. According to recent research there is an association between risk of intrauterine antipsychotic exposure on development of overall and specific neurocognitive disorders.

**OBJECTIVES:** To assess association between maternal use of antipsychotics and neurodevelopmental & neuro motor disorders in infants

**METHODS:** A systematic search was conducted in PubMed, MEDLINE, Embase, Cochrane and Google scholar databases to identify eligible studies including RCTs, case controls & cohort investigating neurodevelopmental consequences in neonates due to intrauterine exposure to antipsychotics. Baseline data was extracted, and methodological appraisal was done using the Newcastle Ottawa Scale. Data from observational studies was pooled according to type of neurophysiological outcome over a minimum of 2 studies using RevMan version 5.2. Risk and hazard ratio were used as the primary outcome measure, and random effect estimation was used to address heterogeneity. Publication bias was assessed using visual inspection of funnel plot and Egger's test.

**RESULTS:** Nine studies that met the eligibility criteria were analyzed. The overall results of the meta-analysis showed significant association between the use of antipsychotic medication during pregnancy and risk of neurodevelopmental disorders in offspring (HR = 1.63, 95% CI: 1.39-1.91) and neuro motor disorders (HR = 1.97, 95% CI: 1.47-2.62). There was no significant association between prenatal antipsychotic exposure and ASD (HR = 1.08, 95% CI: 0.93-1.26), ADHD (HR = 1.02, 95% CI: 0.89-1.18). The analysis of subgroups indicated that the effect sizes were consistent across various study designs and geographic regions.

**CONCLUSION:** The maternal use of antipsychotic medications during pregnancy has a high risk of developing overall neurodevelopmental disorders specifically neuromotor deficits in fetus but no statistically significant relationship with development of ASD and ADHD.

**KEYWORDS:** Antipsychotics, Neurodevelopmental, Neuro motor, Pediatric Neurology

## USE OF STATINS IN REDUCING THE RISK OF ANTHRACYCLINE INDUCED CARDIOTOXICITY; A SYSTEMATIC REVIEW AND META-ANALYSIS

**Presenter:** Danish Ali Ashraf

**Authors:** Danish Ali Ashraf <sup>1</sup>, Farooq Kamran <sup>1</sup>, Ahmed Ali Khan <sup>1</sup>, Ibraiz Bilal <sup>2</sup>, Jai Kumar <sup>3</sup>, Sarwan Kumar <sup>3</sup>

**Affiliation:** <sup>1</sup> Foundation University Medical College, Foundation University Islamabad, <sup>2</sup> Allegheny Health Network Pittsburgh, USA, <sup>3</sup> Wayne State University Detroit, USA

**BACKGROUND:** Anthracyclines are utilized in an array of cancers, similarly statins have been used for a long time to prevent atherosclerotic cardiovascular disease, and however, there is inconsistent and ambiguous evidence on the effects of statins in patients undergoing anthracycline chemotherapy.

**OBJECTIVES:** To discover cumulative evidence regarding the effect of giving statins to patients on anthracycline medication.

**METHODS:** We searched PubMed, Embase, the Cochrane Library, and ClinicalTrials.gov from inception until Jan 27th, 2024 and included articles that were (1) RCTs & studied (2) cancer patients being treated with anthracycline as target population; and (3) statins at any dose as intervention. All analyses were performed using the meta package [9] on R Statistical Software (v4.3.0; R Core Team 2023) [10]. The primary outcomes assessed were the incidence of cardiotoxicity and the decrease in left ventricular ejection fraction (LVEF). We used a random-effects model to pool the studies, employing odds ratio (OR) and mean difference (MD) as effect measures.

**RESULTS:** Our meta-analysis of 6 RCTs showed that cancer patients prescribed statins had a significant low risk of anthracycline-induced cardiotoxicity, unlike those who were not ( $p=0.0031$ , OR 0.41, 95% CI: 0.2674; 0.6307, I<sup>2</sup>: 0%). However, no difference was observed in the change in LVEF between both groups (Left Ventricular Ejection Fraction) decline between two groups ( $p=0.09$ , MD 2.57, 95% CI: -0.67; 5.82, I<sup>2</sup>: 97.2%)

**CONCLUSIONS:** Our meta-analysis of six RCTs revealed that cancer patients who were administered statins had a significantly lower risk of anthracycline-induced cardiotoxicity than those who were not.

**KEYWORDS:** statins; cardiotoxicity; anthracyclines; cardio-oncology

OP 46

**CYBERCHONDRIA AND ITS ASSOCIATION WITH SMARTPHONE ADDICTION: A CROSS-SECTIONAL STUDY AMONG UNDERGRADUATE MEDICAL STUDENTS OF TWIN CITIES, PAKISTAN**

**Presenter:** Fatima Tul Zahra

**Authors:** Easha Masood, Fatima Tul Zahra, Mishaal Zarar, Momina Tehreem, Hurmat Fatima, Danish Ali Ashraf

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** With the surge in the usage of smartphones and the accessibility of health information, escalation in health-related anxiety has become neglectable. With the growing occurrence of Cyberchondria (CYB), and health anxiety it is essential to explore the association between CYB and smartphone addiction.

**METHOD:** A cross-sectional study was conducted to check the prevalence of cyberchondria and mobile phone dependence amongst MBBS students of the Twin Cities. Stratified random sampling was used and a sample size of 362 was calculated using Open epi. An online survey after informed consent was distributed among participants aged  $\geq 18$  years with  $\geq 2$  hours of daily smartphone usage. Ethical approval was obtained from the Ethical Review Committee of FUMC. All statistical analysis was performed using IBM-SPSS, version 26. A p-value of less than 0.05 was considered statistically significant

**RESULT:** A total of 121 participants [female  $n=74(61.2\%)$  and male  $n=47(38.8\%)$ ] were recruited in the survey. The mean age was  $21 \pm 1.511$  years.  $66(54.5\%)$  participants exhibited signs of smartphone dependence.  $32(26.4\%)$  participants were less impacted while  $n=89$  ( $73.6\%$ ) exhibited a moderate-high degree of CYB. A strong interrelation was established between cyberchondria and smartphone addiction by using binary logistic regression. The omnibus test presented a significant chi-square value ( $p=0.024$ ). Moreover, the model's pseudo- $R^2$  value of 0.06 indicates that distinction in smartphone addiction accounts for 6% of Cyberchondria outcomes. An odds ratio of 2.571; 95% CI=1.118-5.912, p value= 0.026 was obtained, proposing that a person with smartphone addiction has a 2.57 times greater chance of developing moderate to high degree CYB.

**CONCLUSION:** Smartphone addiction has insidiously become a constant companion. Regional restriction creates a microcosm that may not accurately reflect the realities of student populations in other areas, diminishing generalizability.

**KEYWORDS:** Smartphone Addiction, Cross Sectional Study, Students, Survey

OP 47

**LONG TERM CLINICAL OUTCOMES OF INTRAVASCULAR-IMAGING GUIDED PCI VERSUS ANGIOGRAPHY-GUIDED PCI IN COMPLEX CORONARY LESIONS: A SYSTEMATIC REVIEW AND META-ANALYSIS**

**Presenter:** Danish Ali Ashraf

**Authors:** Danish Ali Ashraf <sup>1</sup>, Usman Ahmed <sup>2</sup>, Farooq Kamran <sup>1</sup>, Asher Tariq <sup>1</sup>, Farva Zaib Khan <sup>3</sup>

**Affiliation:** <sup>1</sup>Foundation University Medical College, Foundation University Islamabad, <sup>2</sup>Rawalpindi Medical University. <sup>3</sup>Al Nafees Medical College

**BACKGROUND:** Intravascular image-guided percutaneous coronary intervention (PCI) utilizing techniques may offer benefits in optimizing stent implantation and reducing major adverse cardiac events compared to angiography-guided procedures, particularly for complex coronary lesions.

**OBJECTIVE:** In this study, we aim to discuss long term clinical outcomes of IV-imaging guided PCI versus angiography-guided PCI in complex coronary lesions.

**METHODS:** A systematic search and meta-analysis were conducted to assess the efficacy of using Intravascular Ultrasound or Optical Coherence Tomography guidance in coronary artery stenting compared to angiography. Outcome measures such as TLR, MACE, TVR, Stent Thrombosis, and Myocardial Infarction were analyzed. Risk ratios were used as the primary outcome measure. Publication bias was evaluated using a modified Cochrane Collaboration's risk of bias tool for Randomized Controlled Trials.

**RESULTS:** Eleven randomized control trials with 6740 patients were included. For the primary outcome, a pooled analysis (3.2% vs 5.6%, RR 0.61, 0.48-0.77,  $P < 0.0001$ ,  $I^2 = 0\%$ , Heterogeneity  $p$  value= 0.98) showed that the results were in favor of imaging guided PCI. For secondary outcomes, the risk was significantly low in Image guide PCI compared to angiography (4.1% vs 7.2%, RR 0.0.61  $P < 0.0001$ ) for TVR, ( $P = 0.003$ ) for cardiac death, ( $P = 0.00001$ ) for MACE, ( $P = 0.004$ ) for ST and ( $P = 0.04$ ) for MI.

**CONCLUSION:** Intravascular Imaging Guided PCI is significantly more effective than Angiography Guided PCI in reducing the risk of TLR, TVR, Cardiac Death, MACE, ST.

**KEYWORDS:** Coronary artery disease, Percutaneous coronary intervention, Angiography, Intravascular imaging, Optical coherence tomography, Meta-analysis



OP 48

**COMPARATIVE STUDY OF ATTITUDES AND PERCEPTIONS TOWARDS RESEARCH AMONG STUDENTS IN MBBS, DPT, BDS, AND NURSING AT FOUNDATION UNIVERSITY SCHOOL OF HEALTH SCIENCES (FUSH)**

**Presenter:** Muhammad Nouman

**Authors:** Muhammad Nouman, Fatima Khalid, Rayyan Makki, Simra Shoaib, Umm e Rubab, Danish Ali Ashraf

**Affiliation:** Foundation University School of Health Sciences, Foundation University Islamabad

**BACKGROUND:** Research is crucial to the growth of medical sciences, encouraging innovation and improving therapeutic procedures. Understanding students' attitudes and perspectives regarding research is critical since it can influence their engagement and future contributions to the area.

**OBJECTIVES:** To assess and compare students' perception and attitudes towards research across MBBS, BDS, DPT, and nursing at Foundation University School of Health Sciences.

**METHODS:** After taking approval from the institutional review committee, a descriptive cross-sectional study was conducted among students enrolled in MBBS, DPT, BDS, and Nursing. Sample size of 319 was calculated by using Open Epi. Data collection was done using stratified random sampling technique with the help of a pre-validated likert scale questionnaire followed by analysis with SPSS 17. Qualitative variables were analyzed using the chi-square test and a p value of less than 0.05 was considered statistically significant.

**RESULTS:** Analysis of 215 responses revealed that 50.2% (n=108) of the students were aware of research concepts. 60% (n=129) of the individuals perceived research as primarily involving experimenting and testing hypotheses, with significant differences observed among departments (p=0.004). 37.2% of students considered medical research as a good career for them, and this again showed significant departmental variation (p=0.002). While, 47.4% (n=102) of the students viewed research as a stressful task, 22.3 % thought otherwise. Moreover, 34.8% (n=75) found research concepts difficult with a notable difference in responses across departments (p = 0.039).

**CONCLUSIONS:** While many students considered research a burdensome task and found it challenging, a significant number believed that it holds great value for their future professions.

**KEYWORDS:** Cross sectional-study, Perceptions, Attitudes, Research, Medical students



**OP 49**

**SLEEP QUALITY AND PERCEIVED STRESS LEVELS AMONG MEDICAL PRACTITIONERS OF A TERTIARY CARE HOSPITAL IN RAWALPINDI: A CROSS SECTIONAL STUDY**

**Presenter:** Noor-E-Kainaat

**Authors:** Noor-e-Kainaat, Asma Usman, Bushra Asif, Moez Ahmed, Abdul Muaaid, Kaynat Amir, Abdul Manan Ali Abdullah, Maila Sikandar

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Sleep deprivation is a prevalent issue worldwide, particularly among medical professionals and students in their clinical years. Additionally, high levels of stress are commonly reported among them.

**OBJECTIVES:** To assess the sleep quality among study population and to determine the perceived stress level of the study population along with relation between sleep quality and perceived stress among study population

**METHODS:** A cross-sectional study was conducted from March to October 2024 at Fauji Foundation Hospital. The study included 377 healthcare providers selected through convenience sampling. Ethical approval was obtained from the institute. The study excluded nurses, medical students, those diagnosed with sleep disorders, and pregnant doctors. Data was collected using validated questionnaires (PSQI and PSS-10) and analyzed using SPSS version 21.

**RESULTS:** The study included house officers (n = 193, 51.2%), postgraduates (n = 116, 30.8%), and consultants (n = 68, 18.0%). Gender distribution was nearly equal, with 192 males (50.9%) and 185 females (49.1%). Participants had a mean Perceived Stress Scale (PSS) score of 20.14 (SD ± 6.63), indicating moderate stress, and a mean Pittsburgh Sleep Quality Index (PSQI) score of 11.41 (SD ± 3.21), reflecting moderate sleep disturbances. Most participants (68.8%) slept 6 hours or less per night, with 40.1% sleeping under 5 hours. Longer working hours were significantly linked to poorer sleep quality (p = 0.00) and higher stress (p = 0.001). Medical errors were reported by 72.4% of participants, with both stress and sleep quality being significant factors (p = 0.000). No significant associations were found between stress or sleep quality and age, marital status, or gender (p > 0.05).

**CONCLUSION:** The study concluded that most medical practitioners experience poor sleep quality and moderate levels of perceived stress. A strong positive correlation was found between higher stress and poorer sleep quality.

**KEY WORDS:** Medical professional, sleep quality, stress

## THE IMPACT OF SLEEPLESSNESS ON MEMORY AND ACADEMIC PERFORMANCE IN COLLEGE STUDENTS: A CROSS SECTIONAL STUDY

**Presenter:** Muhammad Azhar Shafi

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**BACKGROUND:** Sleep, characterized by a state of reduced brain activity, holds significant importance in cognitive function and overall wellness. Inadequate sleep quality is linked to a decline in work memory capacity and an unfavorable cognitive inclination. The use of sleeping medication among students is also increasing.

**OBJECTIVES:** Our study seeks to emphasize the link between sleep and recall of memory during exams in medical university students and to check if sleeplessness is causing a significant drop in grades of students at university.

**METHODS:** The cross-sectional study was conducted from February to July 2024. Lottery method was used as the sampling technique. Sample size was calculated to be 255 using RaoSoft. Ethical clearance was granted by the IRB of FUSH. The data was collected via online forms using a validated questionnaire. Students of all 5 years OF MBBS were included in the study except those who appeared in supplementary exams or had attendance less than 60%. The independent variable was sleep quality while recall of memory during exam was the dependent variable. All the descriptive and inferential statistics chi square tests were applied using SPSS v 26.

**RESULTS:** A total of 262 responses were collected. Using SPSS, the statistical analysis was done. All the descriptive analysis was done and the mean PSQI score was calculated and chi square test was applied to check for significance. The independent variable- sleep quality, was measured using PSQI while the dependent variable, which was recall of memory, was recorded by asking about the student's perception of their recall ability. The mean age of respondents was 22 years. 59.5% of the respondents were females. 93% of respondents were not used to taking any sleep medication and 47.3% perceived their lifestyle as "unhealthy". 54.6% stated that their recall of memory was affected due to their sleep patterns during exams.

**CONCLUSION:** There was no significant association between sleep quality and recall of memory. Majority of the respondents had cleared their professional exams in their first attempt.

**KEY WORDS:** Sleep quality, memory, academic performance

OP 51

**EVOLVING QUALITY OF LIFE IN MEDICAL EDUCATION: ACROSS FIVE YEARS**

**Presenter:** Aamna Akhtar

**Authors:** Tehreem Rauf, Sundas Farhat, Zoya Almas

**Affiliation:** Fatima Jinnah Medical University

**BACKGROUND:** Medical students generally experience a lower quality of life (QoL) due to academic distress and social pressures. Its adverse effects become increasingly evident as they transition into their professional practice.

**OBJECTIVES:** This study aims to evaluate different aspects affecting QoL and compares the differences in QoL of five years of medical school using WHOQOL-BREF tool.

**METHODS:** The study was conducted among five years of Fatima Jinnah Medical University using WHOQOL-BREF tool. The study was conducted in a three month span (April 2024 - July 2024). A total of 283 students filled the questionnaire with a greater percentage being first year(26.1%) followed by second year(21.6%), third year(21.6%), fourth year(16.6%) and final year(14.1%) with least responses.

**RESULTS:** WHOQOL- BREF questionnaire was used to assess the quality of life of medical students consisting of 6 domains: Demographic Information, General Quality of Life, Physical Health, Psychological Well- Being, Social Relationships and Physical Activity and Mental Health in the first year, only 33.7% students regarded their health status good, compared with 47.5% of the final year students. First year (51.35%) and second year (55.7%) expressed low quality of life compared with students in later years of med school, with 3rd year, 4th year and final year reporting 60.6%, 65.9% and 57.5% respectively. First year students reported lower satisfaction with sleep (24.32%) and physical fitness (20.27%) compared with 50% and 32.5% of the final year students, respectively. Students in all years faced severe academic workload with 28.37% of the first year, 42.6% of the 2nd year, 44.6% of the 4th year and 37.5% of final year students reporting extreme workload and stress whereas only 19.6% of 3rd year students reported extreme academic burden.

**CONCLUSION:** This data shows that sleep, health and physical fitness tend to improve as one advances in studies. Students in 1st year face more challenges and fail to manage their personal life with academics. To address these issues, universities should implement targeted interventions to better support students' overall well-being throughout their medical education.

**KEYWORDS:** Quality of life, Medical school, Academic stress, Physical fitness, Medical students

OP 52

## EXPLORING THE IMPACT OF ALEXITHYMIA AND EMOTIONAL WELL-BEING ON ACADEMIC SELF-EFFICACY OF MEDICAL STUDENTS: A CROSS SECTIONAL STUDY

**Presenter:** Aamna Imran

**Authors:** Aamna Imran, Aimal Kamran, Areej Zahid, Mustafa Hamid Khan, Warda Nawaz

**Affiliations:** Foundation University Medical College, Foundation University Islamabad.

**BACKGROUND:** Mental health disorders, including anxiety and depression, are prevalent among medical students and significantly impact their well-being and academic performance. Depression is linked to major health conditions and is notably high in medical students, with global rates of 28.0%. Anxiety, affecting approximately 4% of the global population, is also common in this group. Alexithymia, characterized by difficulty in recognizing and managing emotions, is prevalent among medical students and exacerbates mental health issues.

**OBJECTIVES:** the aim of this research is to assess how alexithymia, anxiety, and depression affects academic self-efficacy in medical students in the sociodemographic setting of Pakistan

**METHODS:** This cross-sectional study was conducted in Foundation university medical college, surveying 75 students using convenience sampling. Data was collected using the modified Toronto Alexithymia Scale, Self-Efficacy Scale, and GHQ-28. Analysis involved chi-square, t-test, and ANOVA, using SPSS 26.

**RESULTS:** Pearson correlation coefficients revealed negative significant relationships between alexithymia and student self-efficacy (-0.35), negative significant relationship between anxiety/depression and student self-efficacy (-0.26) and a positive significant correlation between anxiety/depression and alexithymia (0.70). A backward multiple regression analysis revealed that alexithymia was a negative significant predictor of self-efficacy in medical students ( $B=0.347$ ,  $P<0.005$ ) the prevalence of alexithymia was 37.3%.

**CONCLUSION:** Alexithymia is prevalent in medical students and self-efficacy of medical students is affected by alexithymia and anxiety/depression. It is suggested that students should be routinely evaluated by mental physicians at universities and efforts should be made towards finding measures to reduce these factors for the better performance of medical students and to avoid psychological problems in the future.

**KEY WORDS:** Alexithymia, Emotional well-being, Self-efficacy

## THE RELATIONSHIP BETWEEN PERSONALITY TRAITS, EMOTIONAL INTELLIGENCE AND DECISION-MAKING STYLES AMONG MEDICAL STUDENTS OF PAKISTAN: A CROSS-SECTIONAL STUDY

**Presenter:** Maryam Abdul Moeed

**Authors:** Maryam Abdul Moeed, Aamna Imran, Dr. Marium Sohail, Dr. Tayyeba Iftikhar.

**Affiliations:** Foundation University Medical College, Foundation University Islamabad, Fazaia Medical College.

**BACKGROUND:** Personality traits, decision-making and emotional intelligence (EI) are significant tools that influence academic performance and patient care. Research has shown that personality traits significantly affect everyday decision-making styles. Another important factor in decision-making and interpersonal relationships is EI. In the medical field, EI is crucial for positive patient experiences and effective communication. Personality is also a key predictor of EI.

### OBJECTIVES:

1. To assess the relationship between personality traits, EI, and decision-making styles among medical students.
2. To examine how personality traits influence both emotional intelligence and decision-making among medical students.
3. To investigate whether emotional intelligence mediates the relationship between personality traits and decision-making styles.

**METHODS:** Convenience sampling was adopted in this cross-sectional study to acquire data from 155 medical students of Foundation University and Medical College and Army Medical College over a period of 6 months. All statistical analysis was done using SPSS26.

**RESULTS:** Higher extraversion was associated with high intuitive, avoidant and spontaneous decision making, higher agreeableness with systematic, intuitive and spontaneous decision-making styles. While higher conscientiousness was associated with intuitive and avoidant decision-making. Lower conscientiousness was associated with spontaneous decision-making style. Higher openness was associated with dependent and avoidant decision-making styles. Lower openness with spontaneous decision making. More neuroticism and openness were significantly associated with intuitive decision making-styles. Higher EI was associated with intuitive and spontaneous decision-making styles, whereas lower EI was associated with avoidant decision-making style. As the data was not normal, mediation

analysis was not applied to identify whether EI mediates relationships between personality traits and decision-making styles.

**CONCLUSION:** This study highlights the significant influence of personality traits and emotional intelligence on decision-making styles among medical students, underscoring the importance of these factors in academic and clinical settings.

**KEYWORDS:** Personality Traits, Decision-Making Styles, Emotional Intelligence

OP 54

**PREVALENCE, RISK FACTORS AND AWARENESS REGARDING THE USE AND ASSOCIATED PATHOLOGY OF E-CIGARETTES IN PAKISTAN: A CROSS-SECTIONAL STUDY**

**Presenter:** Muhammad Huzaifah Qureshi

**Authors:** Abdullah Mughal Fatima Irfan Nidal Falak Amin Shaeel Zarar Niazi

**Affiliation:** NUST School of Health Sciences

**BACKGROUND:** Consequent upon the basic invention of a smokeless non tobacco cigarette by Herbert Gilbert in 1963, a Chinese pharmacist Hon Lik (b. 1951) successfully developed the chemical composition of electronic cigarettes (e-cigarette) in 2003 to minimize cigarette consumption by reducing toxic exposure related to conventional cigarettes. The idea was spearheaded to filter into other parts of the world including Pakistan.

**OBJECTIVE:** This research project explores the impact of e-cigarettes on public health by examining applied designs, health outcomes, and regulatory responses.

**METHODOLOGY:** Through data analysis from diverse populations and a thorough literature review, a cross sectional study was conducted to determine and assess the risks that are associated with it. Data samples for the study have been collected through survey methods and closed-ended questionnaires about the prevalence of risk factors and awareness of the use of e-cigarette from several different individuals at a single point and analyze the data in line with multiple variables for ensuring regular nicotine delivery and its effects on health. Moreover, SPSS was used to analyze the statistics.

**RESULTS:** The study found a strong positive correlation between gender and e-cigarette awareness (Pearson Correlation = 1) and a moderate positive correlation between age and e-cigarette use prevalence (Pearson Correlation = 0.86) among individuals aged 13-30 years. The t-tests indicated a potential difference in e-cigarette use between age groups, but the results were not statistically significant, likely due to the small sample size. Although the correlations were strong, the limited statistical power suggests that further research with larger samples is needed to confirm these findings.

**KEYWORDS:** E-cigarette, public health, nicotine delivery



OP 55

## ASSESSING AI LITERACY IN MEDICAL EDUCATION: UNDERSTANDING MEDICAL STUDENTS' KNOWLEDGE AND ATTITUDES

**Presenter:** Malaika Nasir

**Authors:** Hania Masood, Malaika Nasir, Laibah Rashid, Maira Shahid, Eman Hafeez

**Affiliation:** Rawalpindi Medical University

**BACKGROUND:** Artificial Intelligence (AI) is transforming medicine by providing precise diagnostics, treatment recommendations, and improving decision-making and efficiency. Despite its growing impact across various medical fields, educational opportunities about AI in medicine are inconsistent, leading to insufficient understanding among physicians. Studies highlight a gap in AI ethics education and a need for comprehensive AI training in medical curricula. This research aims to explore medical students' knowledge and perceptions of AI and advocate for its inclusion in medical education.

**METHODS:** The study was conducted at Rawalpindi Medical University from January to June 2024, with ethical approval and informed consent obtained. A structured questionnaire was used to collect demographic data, AI knowledge, and perceptions about AI in medicine from 278 undergraduate students. Data included demographic details, understanding of AI principles, and attitudes towards AI. Analysis was performed using SPSS v27, with descriptive statistics and categorical results analyzed through Chi-Square tests, considering p-values less than 0.05 as significant.

**RESULTS:** The study surveyed 226 medical students on their knowledge, perceptions, and hesitancy towards AI in medicine. Gender distribution was balanced (50.4% male, 49.6% female) and academic years varied. While 94.7% had internet access, only 8.8% had AI training. High awareness of AI's potential in medicine was observed (72.6%), but familiarity with specific applications like radiology (46.9%) and pathology (36.3%) was lower. Participants were optimistic about AI's positive impact on medicine (48.7% agreed) but expressed concerns about its effect on the doctor-patient relationship (23% agreed) and ethical challenges (37.2% agreed). Hesitancy towards AI stemmed from fears of making irreversible mistakes (37.2%), AI surpassing human expertise (33.6%), and a decline in diagnostic skills (38.9%).

**CONCLUSION:** The research reveals that while medical students recognize the transformative potential of AI in medicine, significant gaps in specific knowledge and training remain. Despite high overall awareness, only a minority have received formal AI education, leading to concerns about AI's impact on clinical skills and ethical considerations.

**KEY WORDS:** AI Literacy, Attitudes, Knowledge, Medical Education

## PERCEPTIONS, AWARENESS, AND RISK ASSESSMENT OF DYSLEXIA: A SURVEY-BASED STUDY

**Presenter:** Elsa Siddiqui

**Authors:** Elsa Siddiqui, Eman Khalid

**Affiliation:** RIPHAH International University

**BACKGROUND:** Dyslexia is often misunderstood, especially in adulthood. Many adults face challenges with reading, writing, and information processing without realizing dyslexia may be the cause. This study examines perceptions of dyslexia, its perceived impact on intelligence, and awareness levels among participants. It emphasizes the importance of screening adults to understand dyslexia's presentation in later life.

**OBJECTIVES:** The study aimed to assess awareness, misconceptions, and perceived cognitive impacts of dyslexia. It also sought to categorize participants into dyslexia risk levels using a structured screening test and to explore correlations with previous diagnoses.

**METHODS:** A survey of 60 participants assessed awareness of dyslexia, its perceived impact on intelligence, and related cognitive functions. A structured diagnostic assessment evaluated difficulties in reading, writing, spelling, phonological awareness, and information processing. Participants were categorized into four dyslexia risk levels: Low risk (0-25), Low-Moderate risk (26-50), High-Moderate risk (51-75), and Very High risk (76-100).

**RESULTS:** Among the participants, 8.3% were classified as low risk, 61.7% as low-moderate risk, 23.3% as high-moderate risk, and 6.7% as very high risk. Combined, 30% had moderate to very high risk for dyslexia. Of six participants previously diagnosed with dyslexia, five believed it affects intelligence, despite evidence to the contrary. Awareness was moderate, with 51.7% showing significant awareness, but 25% had low awareness. Additionally, 43.3% felt dyslexic individuals are perceived negatively.

**CONCLUSION:** The study reveals gaps in understanding dyslexia, particularly regarding its impact on intelligence. With 30% of participants at moderate to very high risk, the varying levels of awareness and persistent misconceptions highlight the need for better education and screening for dyslexia in adults. Improving awareness and addressing misconceptions are crucial for effective support and diagnosis.

**KEYWORDS:** Dyslexia, Awareness, Intelligence, Risk Assessment, Misconceptions

## EFFECT OF BEVACIZUMAB COMBINED WITH IRRADIATION VS BEVACIZUMAB ALONE ON SURVIVAL OF PATIENTS WITH RECURRENT GLIOBLASTOMA- A SYSTEMATIC REVIEW AND META-ANALYSIS

**Presenter:** Beenish Sabir

**Authors:** Haris Mumtaz Malil, Beenish Sabir, Abdullah bin Kamran, Amina Khan

**Affiliation:** Rawalpindi Medical University

**BACKGROUND:** Gliomas are the most common cancers of brain parenchyma, with different types depending on the type of glial cells involved. Of all the types, Glioblastomas are the most important and terrifying, with a median survival rate of 15 months after diagnosis. The main surgical treatment for GBM includes the maximal surgical resection of the tumor followed by combinations of chemotherapy. Among all the chemotherapeutic drugs, Bevacizumab, a monoclonal antibody targeting vascular endothelial growth factor (VEGF), has emerged as an encouraging therapeutic agent in the treatment of GBM.

**OBJECTIVES:** This study aims to assess the efficacy of bevacizumab combined with irradiation vs bevacizumab alone in treatment of recurrent glioblastoma.

**METHODS:** A comprehensive review of the literature was conducted retrospectively across databases such as PubMed, Cochrane, Embase, and Clinicaltrials.gov. The search strategy employed the Medical Subject Headings (MeSH) and pertinent keywords relevant to Astrocytoma, glioblastoma, bevacizumab, and radiotherapy targeting the studies published up to 1<sup>st</sup> June 2024. We assessed Overall Survival (OS) and Progression-Free Survival (PFS) for up to 1 year. We applied a random-effects model of meta-analysis via the mantel-Haenszel method to synthesize Odds Ratios (OR) for the dichotomous outcomes, utilizing Review Manager (Revman) v5.4.

**RESULTS:** After primary and secondary screening, 4 studies were included in the analysis; 3 were cohort and 1 was RCT. A total of 390 patients were studied across the studies. Bevacizumab with Radiation therapy was far more efficacious in terms of PFS (RR, 95%CI values). It also proved to be safer as it significantly increased 1-Year Overall Survival (RR, 95%CI values).

**CONCLUSION:** The combination of bevacizumab with irradiation demonstrates superior efficacy and safety compared to bevacizumab alone in the treatment of recurrent glioblastoma. This combination therapy significantly improves progression-free survival and 1-year overall survival, suggesting a promising approach for enhancing the management of this aggressive and challenging brain tumor. Further research and larger clinical trials are warranted to confirm these findings and optimize treatment protocols.

**KEYWORDS:** Bevacizumab, Gliomas, Glioblastoma, Radiation therapy

## ADHERENCE TO DRUG THERAPY FOR GERD

**Presenter:** Suhaib Siddiqui

**Authors:** Suhaib Siddiqui, Muhammad Umar, Ahmad Hamza, Waqar Sultan, Usman, Ahmed Bilal

**Affiliation:** Watim Medical College

**BACKGROUND:** Compliance is referred to as the extent to which the patient's behavior matches the prescriber's recommendations. Ensuring patient compliance to drug therapy is imperative for optimal patient response and outcome. Lack of adherence or low compliance may prove to affect treatment efficacy and raise concurrent healthcare costs.

**OBJECTIVES:** To determine the prevalence of adherence to drug therapy for GERD and to determine the effects of adhering to drug therapy on patient's symptoms

**METHOD:** It was a Retrospective Cohort Study with a sample size of 107 calculated by using WHO calculator. Convenient sampling technique was used. Data was collected from DHQ, Rawalpindi by using a valid questionnaire. Data was analyzed by SPSS version 26.0.

**RESULTS:** Out of 107 respondents, 52% belong to the 40-50 age group, 53% of them are male, 52% were illiterate. 39% had a severe stage of GERD and 60 % stopped taking their medication when the symptoms were relieved. 39% claimed to never have missed their medication in the first place. 43% felt that the medication was excellent in managing their symptoms.44% had symptom relief as the motivation for adherence to medication.28% felt that taking medication was not necessary.35% thought improved communication with their healthcare providers could help them adhere to their medication.

**CONCLUSION:** Adherence to medication plays a pivotal role in symptom relief. It involves a two-way relation between the healthcare provider and the patient to ensure maximum efficacy of the medication.

**KEYWORDS:** Drug therapy, GERD, patient's behavior

OP 59

## ASSESSMENT AND KNOWLEDGE OF RISKS AND PREVENTION OF CONSANGUINEOUS MARRIAGE AMONG MEDICAL STUDENTS OF FOUNDATION UNIVERSITY OF HEALTH SCIENCES, ISLAMABAD: A CROSS-SECTIONAL STUDY

**Presenter:** Maryam Tanveer

**Authors:** Amal Shahzad Khan Asher Tariq Farooq Kamran, Maryam Tanveer, Huma Ishfaq, Danish Ali Ashraf, Abdul Rehman

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Consanguineous marriages remain a significant issue as they define future generations and population health. The higher probability of inheriting recessive genes increases the danger of genetic abnormalities and malformations. However, the masses are generally unaware of these hazards. Pakistan exhibits a pervasive problem with consanguineous marriages.

**OBJECTIVES:** To assess attitude and knowledge about the risks of consanguineous marriage and raise awareness about preventive measures against consanguinity among medical students.

**METHODS:** A quantitative cross-sectional study approved by the Institutional Ethical Review Committee (ERC) was conducted among male and female MBBS students. The sample size was calculated using OpenEpi software. Data was collected through a validated questionnaire by simple random sampling technique. Data was analyzed using SPSS 26 and  $p < 0.05$  was considered statistically significant in all the tests. Ethical approval was received from FUSH ERC committee before data collection.

**RESULTS:** The cross-sectional study conducted among 226 medical students at Foundation University Medical College (FUMC) revealed that 49% reported a personal or family history of consanguineous marriages, with a noticeable declining trend potentially due to a reduction in first-cousin marriages. Despite 69% of students demonstrating moderately high awareness of the associated health risks, 75% maintained a positive attitude toward consanguineous marriages, a significant predictor of its continued practice.

**CONCLUSION:** Despite the moderately high awareness of health risks associated with consanguineous marriages among medical students at FUMC, the strong positive attitudes towards consanguinity suggest that the practice is still highly prevalent. The significant positive attitude observed in 75% of the students outweighs their understanding of the negative health consequences, indicating that cultural factors strongly influence the continuation of consanguineous practices. To address this issue, comprehensive educational and motivational programs are essential to shift attitudes and reduce the prevalence of congenital anomalies linked to consanguinity.

**KEYWORDS:** Consanguinity, anomalies, malformations, recessive genes

OP 60

## ANALYSIS OF OVER-THE-COUNTER PAINKILLER KNOWLEDGE, USE AND AWARENESS AMONG MEDICAL STUDENTS

**Presenter:** Asadullah khan

**Authors:** Muhammad Saad, Furqan Ayub, Ayaan Naeem, Ahmed Ali

**Affiliation:** Watim Medical College

**BACKGROUND:** Over-the-counter (OTC) painkillers are readily available and frequently used by medical students, often without proper consultation or awareness of the potential risks. This study aims to assess the knowledge, usage, and awareness of OTC painkillers among medical students, highlighting the implications of self-medication.

**OBJECTIVES:**

1. To evaluate the knowledge of medical students regarding the use of OTC painkillers.
2. To analyze OTC painkiller usage and the factors influencing OTC painkiller use among medical students.

**METHODS:** In August 2024, a cross-sectional study surveyed 72 medical students (mean age 20.4 years) using Google Forms. Data on demographics, OTC drug use, reasons for use, and awareness were analyzed with descriptive statistics.

**RESULTS:** The sample consisted of 72 medical students, with 45.8% male and 54.2% female. Painkillers were the most commonly used OTC drug, reported by 69% of respondents taken by 95.2% in tablet form. Only 45.7% were prescribed by healthcare professionals while others admitted to using OTC painkillers without prior consultation, primarily due to the availability of these drugs in personal stock 31.9% while 16.7% due to urgency of problem. Awareness of drug packaging and instructions varied, with 35.75% of students on average fully understanding the information provided, while remaining demonstrated limited or no knowledge. 59.7% of students admitted to using painkillers by recommendation of family/friends, and 33.5% admitted to using painkillers by internet recommendation.

**CONCLUSION:** This research shows that medical students frequently use OTC painkillers but lack adequate knowledge about safe usage. Educational efforts on the risks of unsupervised self-medication are vital to encourage safer practices.

**KEYWORDS:** OTC painkillers, self-medication, medical students, drug awareness

OP 61

**SEVEN YEARS OF STRUGGLE: TRACKING THE EVOLUTION OF ANTIMICROBIAL RESISTANCE IN ACINATOBACTER BAUMANNI**

**Presenter:** Arfa Zafar

**Authors:** Arfa Zafar, Muhammad Nihal Moarij Azeem Malik, Muhammad Irfan, Muhammad Hamza Khan, Abdul Toheed Khalid

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** *Acinetobacter baumannii* is an aerobic, pleomorphic, non-motile gram-negative bacillus. It is an opportunistic pathogen primarily targeting wet tissues, including mucous membranes and exposed skin from accidents or injuries. *A. baumannii* are methyl red positive, Voges-Proskauer negative, nitrate reduction negative, urease negative, indole negative, catalase positive, oxidase negative, non-fastidious, non-fermentative (oxidative) organism that exhibit growth at 44°C.

**OBJECTIVES:** The primary aim of the study was to evaluate the antimicrobial susceptibility patterns against *A. baumannii*.

**METHODS:** All clinical samples were collected aseptically from various hospital departments and wards, inoculated on blood agar and MacConkey's agar, and incubated for 24 hours at 37°C. The results were recorded and analyzed using Microsoft Excel.

**RESULTS:** A total of 1125 *A. baumannii* samples were isolated. Colistin was found to be effective against approximately 551 (96.50%) strains, followed by Polymyxin B in 712 (96.61%) strains. Antimicrobials such as Ampicillin, Azteronam, Cefotaxime, Co trimoxazole, Ceftazidime imparted no effect on more than 90 % of the cultured isolates of *A. baumannii*.

**CONCLUSION:** This study highlights a significant increase in *A. baumannii* resistance to several commonly used antibiotics, with over 90% of strains showing resistance to Ampicillin, Azteronam, Ceftazidime, and others. Colistin remains the most effective, with a 96.50% efficacy rate. The results highlight how critical it is to address the growing problem of antibiotic resistance by implementing strict antibiotic stewardship and ongoing surveillance.

**KEYWORDS:** *Acinetobacter baumannii*, Susceptibility, Antimicrobials



OP 62

## THE CHANGING FACE OF MRSA: ANTIMICROBIAL RESISTANCE TRENDS OVER 7 YEARS

**Presenter:** Abdul Toheed Khalid

**Authors:** Abdul Toheed Khalid, Aleena Ahmed, Arfa Zafar, Muhammad Nihal Moarij

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** *Staphylococcus aureus*, a Gram-positive bacterium, causes symptoms ranging from moderate skin and soft tissue infections to potentially lethal vascular or deep-seated infections. *S. aureus* can produce enzymes such as coagulase, hyaluronidase, deoxyribonuclease, and lipase, which enhance its pathogenicity and facilitate its spread throughout the host.

**OBJECTIVES:** The primary aim of the study was to evaluate the antimicrobial sensitivity patterns of Methicillin-Resistant *S. aureus* (MRSA).

**METHODS:** All clinical samples were collected aseptically from various hospital departments and wards, inoculated on blood agar and MacConkey's agar, and incubated for 24 hours at 37°C. The results were recorded and analyzed using Microsoft Excel.

**RESULTS:** A total of 2,460 MRSA samples were isolated. Vancomycin was found to be effective against approximately 2,446 (99.43%) strains, followed by Linezolid in 1,861 (98.57%) strains. Key antibiotics such as Penicillin, Ceftazidime, Augmentin, Ceftriaxone, Cloxacillin, Imipenem, Ampicillin, Cefotaxime, Meropenem, and Cephadrine showed no effect on MRSA.

**CONCLUSION:** This study highlights a significant increase in MRSA resistance to several commonly used antibiotics, with over 99% of strains showing resistance to Penicillin, Ceftazidime, and others. Vancomycin remains the most effective, with a 99.43% efficacy rate. The findings underscore the urgent need for stringent antibiotic stewardship and continuous surveillance to manage the escalating challenge of antibiotic resistance.

**KEY WORDS:** MRSA, Antimicrobial sensitivity, antibiotics

## IMPOSTER SYNDROME AND ITS ASSOCIATION WITH ATYCHIPHOBIA AMONG MEDICAL STUDENTS

**Presenter:** Zenab Younas

**Authors:** Zenab Younas, Izza Zahra, Faiza Ikram, Taha Mazhar awan, Hurmat Fatima, Dr. Ammarah Abid

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Imposter syndrome is a condition in which a person suffers from self-doubt and has fear of being discovered as an intellectual fraud. Atychiphobia is an excessive and illogical fear of failure or facing uncertainty. Inadequate research on IS and its association with atychiphobia in Pakistan and lack of its awareness encouraged us to pursue this study

**OBJECTIVES:** To determine the prevalence of Imposter syndrome among medical students and to find out the prevalence of Atychiphobia among students. We also aim to determine the association between Atychiphobia and Imposter syndrome.

**METHODS:** A quantitative cross-sectional study was conducted in Foundation University Medical College. Stratified random sampling was used to collect data online using a validated questionnaire. Students from all five years of MBBS were included in the study. The data was analyzed on SPSS 26.

**RESULTS:** The sample consisted of n=255 participants of ages ranging from 18-26yrs (mean+SD) [21.42±1.86]. IS was observed in the age group of 18-22 yrs with n=73 [28.6%] and Atychiphobia was observed in the same age group with n=34 [13.3%]. Females suffer more from IS and atychiphobia than their male counterparts with n=74 [29%] and n=37 [14.5%] respectively. Final year students were more affected with atychiphobia with n=20 [7.8%] and 3rd year students were seem to be more affected by IS with n=24 [9.4%]. A total of n=93 [36.4%] suffered from imposter syndrome. A total of n=55 [21.5%] suffered from atychiphobia. The frequencies of IS do not show significant association with atychiphobia [ $p>0.05$ ].

**CONCLUSION:** The study showed that more than 1/3rd of our sample population had suffered from IS and less than 1/3rd from atychiphobia. No significant association was found between atychiphobia and IS.

**KEYWORDS:** Imposter syndrome, atychiphobia self-doubt

OP 64

**PERSONAL HYGIENE STATUS AND PREVALENCE OF SKIN AND GIT DISEASES  
IN ORPHANAGES OF TWIN CITIES: A QUASI EXPERIMENTAL STUDY**

**Presenter:** Ali Ahmad Khan

**Authors:** Mahnoor Fayyaz, Muhammad Tanveer Naveed Qazi, Ali Ahmed Khan, Areej Fatima

**Affiliation:** Foundation University School of Health Sciences, Foundation University Islamabad

**BACKGROUND:** Appropriate hygienic habits are acquired during childhood, taught by their caregivers. Unhygienic practices can become a hindrance, affecting quality of life. Improper hygiene can cause the spread of communicable diseases. In orphanages, every resident cannot be given individual care thus, the overall hygiene status is hypothesized to be lower than average.

**OBJECTIVES:** To determine hygiene practices in orphans and also to determine the burden of disease in orphans.

**METHODS:** A Quasi experimental study over a period of 8 months through “purposive sampling”. Structured interviews using “knowledge, attitude and practice of personal hygiene” and “hygiene inventory” questionnaires. The results of the pre-intervention phase will be analyzed along with prevalence of hygiene-related GIT diseases (diarrhea, cholera, dysentery, bacterial gastroenteritis) and skin diseases (Tinea capitis, Atopic eczema, Tinea cruris). Afterwards, health awareness sessions will be delivered, regarding proper hygiene practices. The post-interventional phase will be conducted after 4-6 months. The new prevalence of hygiene-related GIT and skin diseases will be noted.

**RESULTS:** Literature review reveals that the post-interventional phase of quasi experimental studies shows better results in relation to subjects’ knowledge and practices. Moreover, the findings will be significant in assessing the intervention’s effectiveness.

**CONCLUSION:** Implementing the knowledge gained during the counseling in daily life can improve the overall health and decrease the prevalence of hygiene related diseases.

**KEYWORDS:** Hygiene, orphanages, GIT diseases, Skin diseases.

OP 65

**EFFICACY AND SAFETY OF DISTAL RADIAL ARTERY VERSUS PROXIMAL RADIAL ARTERY IN CARDIAC PROCEDURES: A SYSTEMATIC REVIEW AND META-ANALYSIS**

**Presenter:** Hafsa Arshad Azam Raja

**Authors:** Mohammad Ebad Ur Rehman<sup>1</sup>, Hafsa Arshad Azam Raja<sup>1</sup>, Muhammad Osama<sup>2</sup>, Aisha Kakakhail<sup>3</sup>, Muhammad Hassan Waseem<sup>4</sup>, Muhammad Mukhlis<sup>5</sup>, Muhammad Abdullah Ali<sup>2</sup>, Zain Ul Abideen<sup>6</sup>, Muhammad Shoaib<sup>2</sup>, Zahir ud Din<sup>2</sup>, Ammara Tahir<sup>7</sup>, Muhammad Zohaib Ul Hassan<sup>2</sup>, Usman Mazhar<sup>1</sup>, Syed Tehseen Haider<sup>1</sup>, Sajeel Saeed<sup>1</sup>, Abdulqadir J. Nashwan<sup>8,9</sup>.

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**BACKGROUND:** Cardiac catheterization using the distal radial artery access (DRA), at the level of the anatomical snuff box post radial artery bifurcation, may be linked to a lower rate of arterial occlusion and better hemostasis.

**OBJECTIVE:** In this meta-analysis, we compare DRA versus proximal radial artery access (PRA) in cardiac catheterization or angiography.

**METHODS:** A detailed literature search was performed on PubMed, Cochrane, Embase and Clinicaltrials.gov from inception till June 2024. Risk ratios (RR) and mean differences (MD) were pooled for categorical and continuous outcomes, respectively. Random effects meta-analysis was undertaken on Revman.

**RESULTS:** Our meta-analyses include 21 randomized controlled trials with 9,539 patients (DRA 4,761, PRA 4,778). DRA was significantly superior in terms of the radial artery occlusion at 24 hours (RR 0.30, 95% CI 0.23 to 0.40,  $p \leq 0.00001$ ), and time to hemostasis (minutes) (MD -44.46, 95% CI -50.64 to -38.92,  $p < 0.00001$ ), whereas PRA was significantly superior in terms of the puncture success rate (RR 0.96, 95% CI 0.93 to 0.99,  $p < 0.01$ ), the crossover rate (RR 2.89, 95% CI 2.02 to 4.15,  $p < 0.00001$ , and puncture attempts (MD 0.69, 95% CI 0.37 to 1.00,  $p = 0.00001$ ).

**CONCLUSION:** DRA was associated with a lower risk of occlusion and lower time to hemostasis, but required a greater number of puncture attempts and had lower success rate. Further research is required to elucidate the most optimal approach.

**KEYWORDS:** Cardiac procedures; radial artery; angiography; percutaneous Coronary intervention; myocardial infarction

OP 66

**TRENDS IN PANCREATIC CANCER RELATED MORTALITY; A RETROSPECTIVE ANALYSIS USING CDC WONDER DATABASE**

**Presenter:** Kanz ul Eeman Maryam

**Authors:** Kanz ul Eeman Maryam

**Affiliation:** Foundation University Medical College, Foundation University Islamabad

**BACKGROUND:** Pancreatic cancer is the 8<sup>th</sup> most prevalent cancer in the United States with a very high mortality rate. Understanding the epidemiology of pancreatic cancer is important in identifying the causes and developing preventive strategies.

**OBJECTIVE:** To examine temporal trends in mortality rates by gender and census region for pancreatic cancer-related mortality in the United States.

**METHODS:** Data from the death certificates spanning from 1999-2020, sourced from CDC WONDER (Centers for Disease Control and Prevention Wide-Ranging Online Data for Epidemiologic Research) was analyzed, which being publically available was exempt from ethical review. To quantify national annual trends in pancreatic cancer-related mortality, the Joinpoint Regression Program was used to determine the annual percent change (APC) with 95% CI in age-adjusted mortality rates (AAMRs) per 100,000 people for all ages stratified by year, gender and regions.

**RESULTS:** Pancreatic neoplasm claimed about 847,589 lives across all age groups in the US from 1999-2000. Pancreatic Cancer showed a steep rise in AAMR from 11(95%CI:10.9-11.1) in 2003 to 11.3(95%CI:11.2-11.3) in 2006 with APC of 0.87(95%CI:0.33-1.25). Men consistently had higher AAMRs than women across all age groups throughout the study period of 1999-2000 [(overall AAMR men: 13.2 (95% CI: 13.1-13.2); overall AAMR women: 9.9 (95% CI: 9.9-10)]. Geographically; the highest mortality was displayed by the Northeast region (AAMR 11.9, 95%CI: 11.6-12.1), followed by the Midwestern (AAMR 11.7, 95%CI: 10.9 -11.4), the Southern (AAMR 11.1, 95%CI: 10.9-11.4) and the Western (AAMR 10.5, 95% CI: 10.2-10.7) regions.

**CONCLUSION:** We observed an overall annual increase in mortality trends related to pancreatic cancer especially in men and certain regions like the Northeast region of the United States. These results emphasize the necessity for comprehensive strategies to address this lethal illness, encompassing breakthroughs in medical research, focused public health initiatives, and extensive governmental reforms.

**KEY WORDS:** Pancreatic Cancer, mortality, CDC Wonder data base

## PERCEPTION OF VAPOR PRODUCTS & ITS IMPACT ON GENERAL HEALTH AMONG HEALTHCARE AND NON-HEALTHCARE STUDENTS

**Presenter:** Mahnoor Dawood

**Authors:** Maham Azeem, Mahnoor Dawood, Nadia Zaib, Wajahat Ghafoor, Fakeha Ansari, Sidra Ghayas

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad.

**BACKGROUND:** Global health concerns have been raised by the increasing prevalence of vapor products, such as vapes, e-cigarettes and sheesha. Despite claims of reduced harm, these products pose significant risks to general health, including lung injury, cardiovascular disease, and oral health issues.

**OBJECTIVE:** This study aims to investigate the perceptions of vapor products and their perceived health impacts among healthcare and non-healthcare students.

**METHODS:** After taking ethical approval and informed consent from all participants, a cross-sectional, comparative study was conducted among healthcare and non-healthcare students to assess perception of vapor products and their perceived impact on health. A convenience sample of 635 participants was obtained. Data was collected using a pre-validated structured questionnaire with content reliability score of 0.762 the data was analyzed using SPSS version 20. Categorical data was presented in the form of frequencies and percentages. Chi-square test was employed to evaluate the data with a p-value of less than 0.05 considered significant.

**RESULTS:** The study involved 195 male and 440 female participants, aged 18-35, with a mean age of 21. Among them, 91% were undergraduates and 9% were postgraduates, with 61.7% identified as healthcare students. Vaping was found significantly more common among non-healthcare students. Majority participants considered e-cigarettes to be equally addictive as regular cigarettes with a statistically significant p- value < 0.05. Regarding accessibility, 80% of participants believed it was not difficult to purchase cigarettes or vapes. Additionally, 75% healthcare and 80% non-health care students' perceived e-cigarettes to be more harmful than regular cigarettes. The primary reasons cited for initiating vape use were stress/depression and quitting regular cigarettes. Most vape users reported no change in physical health, but the most common adverse effect noted was a sore or dry mouth or throat (p-value < 0.01).

**CONCLUSION:** Healthcare students demonstrated a better understanding of the potential harms of vapour products compared to their non-healthcare counterparts.

**KEYWORDS:** vapor products, e-cigarettes, sheesha, perception, general health

**OP 68**

**GAUGING SUPPORT AND OPPOSITION: PUBLIC VIEWS ON SEX EDUCATION IN PAKISTAN**

**Presenter:** Rameen Kamran

**Authors:** Rekhmeena Gul Sahibzada, Hiba Omer, Farzana Hakim

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad, National University of Science and Technology

**BACKGROUND:** Sexual education still appears to be a controversial subject in Pakistan, with conversations surrounding the topic treated as taboo and associated with impurity. Despite efforts to censor it and the cultural stigma surrounding it, the country has high abortion and STI rates, with 2.2 million abortions reported in 2012 at an annual rate of 50 abortions in every 100 women. Pakistan's population growth rate of 2.5% is the highest in Southeast Asia, which can be attributed to several factors, including low contraceptive prevalence and a lack of access to family planning services.

**OBJECTIVES:** The objective is to introduce sex education in a way that is both culturally and religiously appropriate while taking into account social stigmas and augmenting health outcomes.

**METHODS:** The study was carried out in NUST and FUSH from December 2023-July 2024. It included both students and staff members from NUST and FUSH, ranging in age from 17 to 43 years. Data was collected using questionnaires assessing public attitudes regarding putting into practice sex education in schools, as well as identifying associated challenges and the necessary topics for inclusion. SPSS Version 21 was used for analysis of the data.

**RESULTS:** In total 496 responses were received, 384 within NUST and 114 within FUSH, comprising 302(60.8%) females and 193(38.9%) males. 64.7% of the respondents at NUST and 60% at FUSH reported feeling uncomfortable discussing such topics with their families, with 53.8% at NUST and 40.4% at FUSH believing that social and cultural factors influenced their opinions. Moreover, 88% of NUST respondents and 80.8% of FUSH respondents agreed that there was an increased need for sex education in Pakistan, with a strong emphasis on consent, communication, and mental as well as physical well-being.

**CONCLUSION:** The exposure of our youth to sex education from reliable resources is necessary to prevent the propagation of harmful notions and stereotypes.

**KEYWORDS:** sex education, Pakistan, social stigmas



OP 69

## MANAGING SPECIAL NEEDS PATIENTS: A GRADUATE PERSPECTIVE ON THE INCLUSIVITY OF DENTAL SCHOOL CURRICULA

**Presenter:** Anoosha Usman

**Authors:** Muhammad Umair, Khadija Binte Nawaz, Anoosha Usman, Ilsa Azhar, Ilham Basharat, Azka Zafar

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad

**BACKGROUND:** According to UNDP, 6.2% of Pakistanis have disabilities, ie. 3.3 to 27 million. These patients are at high risk for dental caries regardless of accompanying systemic diseases. Furthermore, insufficient dental training to manage such patients limits practitioners' ability to provide care when enhanced preventive care and regular checkups are required.

**OBJECTIVE:** This study aims to explore the role of dental education in enabling general dentists to effectively treat individuals with special needs requiring oral healthcare.

**METHODS:** This quantitative cross-sectional study with 123 sample size, involved 177 participants, including BDS house officers, general dental practitioners, postgraduate trainees, and dental specialists. Using a pre-validated questionnaire, data on managing special needs patients was collected from multiple dental institutes and analyzed with SPSS version 21, following ethical approval.

**RESULTS:** The study highlights that while 67.8% of dentists held a BDS degree and 85.3% had graduate training in Pakistan, only 27.1% felt adequately prepared to treat special needs patients from their undergraduate education. Although 36.2% expressed strong interest in continuing education (CE), 85.3% had not attended any CE programs in the last two years. Practice resources were limited, with only 29.9% having specialized setups and 34.5% using special visual aids, while 70.6% rated their staff's knowledge as neutral or lower. Time constraints were a moderate impact for 35.6% of respondents, underscoring the need for better training and resources.

**CONCLUSION:** Correlation exists between dental education and preparation and confidence in treating patients with special needs. Most dentists did not feel confident treating special needs patients. While continuing education is beneficial, more than half had not recently done so. Dentists with personal connections felt more prepared, but specialized office layout and staff training were limiting factors.

**KEY WORDS:** Special needs patients, dental school, curriculum

OP 70

**ARE LOWER MIDDLE INCOME COUNTRIES (LMICS) PREPARED TO EMBRACE  
ADVANCED NANOTECHNOLOGY IN DENTISTRY? ASSESSMENT OF  
KNOWLEDGE AND INTENTIONS TO USE NANO-MATERIALS OF DENTAL  
CLINICIANS IN PAKISTAN**

**Presenter:** Muhammad Khubaib

**Authors:** Muhammad Khubaib, Hassan Shahbaz, Sanaa M Aslam

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad

**BACKGROUND:** Nanoscience has greatly revolutionized dentistry in high income countries by providing the developed world with modern means and tools to address some of its most critical challenges in contemporary dentistry. However, little is known about it in the developing world which is strongly debating whether it is a blessing or a curse.

**OBJECTIVE:** This study was a quantitative and qualitative application of theory of planned behavior to explore attitudes, knowledge, and experience, perceived behavior controls, subjective norms and intention to use nanotechnology amongst general dental practitioners in Pakistan and identify any differences based on gender, years of clinical experience and/or geographical location.

**METHODS:** A convergent parallel mixed methods design i.e. both quantitative and qualitative data collection was done simultaneously but analyzed separately with the purpose of creating mutually exclusive sets of data that inform each other. For quantitative assessment, a cross-sectional survey of 122 Dental practitioners employed in two teaching dental institutes of Rawalpindi and Islamabad selected at random via lottery was done. The qualitative components of the study included an in-depth interview of 12 key informants. Thematic analysis was done on rich narratives of these key informants

**RESULTS:** The questionnaire was validated following robust face and construct validation with  $\alpha=0.83$ . 52.5% of the survey respondents reported having little knowledge of the scope of nanomaterials utilization in dental practice. A significant majority (81.1%) of the respondents were early practitioners with 1-5 years of clinical experience. Kruskal Wallis test was applied to understand the correlation between total knowledge score and number of years of clinical experience of the ( $p=0.163$ ). When applied to perceived risks ( $p=0.112$ ), attitudes towards nanotechnology scores ( $p=0.137$ ), perceived behavior scores (0.186) and subjective norms scores ( $p=0.246$ ) no significant results were found. However, the intention to use nanomaterials and the number of clinical years was significant ( $p=0.009$ ). A positively significant correlation was also found between gender and intention to use scores ( $p=0.07$ ), perceived behavior control scores ( $p=0.01$ ) and subjective norms ( $p=0.15$ ).

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1<sup>ST</sup> October 2024

**CONCLUSION:** Dental practitioners demonstrated limited knowledge of nanomaterials which was slightly improved with the number of years of clinical practice and expertise. A clear desire for more information about the application of nanotechnology in dentistry was expressed by the respondents indicating a need for curriculum modification.

**KEY WORDS:** Dentists, Nanomaterials, Theory of Planned Behaviour, Knowledge, Intention to use

## THE ROLE OF AI IN DENTAL EDUCATION IN DEVELOPING COUNTRIES: A CROSS-SECTIONAL STUDY

**Presenter:** Shamayam Mustaf

**Authors:** Shamayam Mustafa, Eisha Ali, Afeefa Asim, Zuha Wasim

**Affiliation:** Islamic International Dental Hospital

**BACKGROUND:** The integration of artificial intelligence (AI) in dental education holds the potential to transform learning and enhance the readiness of dental professionals in developing countries.

**OBJECTIVE:** To investigate the impact of AI on educational quality and explore the factors influencing its adoption.

**METHODS:** A cross-sectional study was conducted using data from 301 dental professionals affiliated with academic institutions in developing countries. The study utilized a Gradient Boosting Machine (GBM) to model the relationship between AI tool usage in education and perceived improvements in educational quality. Independent variables included demographic factors, professional experience, and attitudes towards AI. To assess the causal effect of AI adoption on educational outcomes, Difference-in-Differences (DiD) analysis was applied, comparing outcomes between institutions that have integrated AI and those that have not. Cross-validation techniques were used to ensure model robustness, and sensitivity analyses were conducted to validate the causal estimates.

**RESULTS:** The GBM model revealed that frequent use of AI tools in dental education significantly correlates with perceived improvements in educational quality. DiD analysis supported these findings, showing a positive impact of AI integration on educational outcomes, particularly in institutions with advanced AI infrastructure. The study also identified key factors influencing AI adoption, including professional experience and institutional support.

**CONCLUSION:** This study highlights the pivotal role of AI in enhancing dental education in developing countries. The findings suggest that targeted efforts to integrate AI into curricula, supported by institutional investment and professional development, could significantly improve educational quality and readiness for clinical practice.

**KEYWORDS:** Artificial intelligence, dental education, developing countries, educational quality, AI adoption, Gradient Boosting Machine, Difference-in-Differences.

OP 72

## OPTIMIZING DENTAL CLINICS: A SURVEY-BASED APPROACH AND PRACTICAL ADVICE

**Presenter:** Maryam Ilyas

**Authors:** Abdul Qadir, Yosra Saeed, Maryam Ilyas, Ayesha Arif and Shahmeen Khattak

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad

**BACKGROUND:** Dental practices play a crucial role in maintaining oral health and well-being. However, the design, layout, and functionality of clinical spaces significantly impact the health of dental professionals as well as the patient experiences and treatment outcomes.

**OBJECTIVES:** This research aims to evaluate operational clinical spaces and then provide actionable recommendations for future dental practices.

**METHODS:** The study design was cross-sectional descriptive study, and sampling technique used was non probability convenience sampling. A total of 50 registered dental clinics were randomly selected from the cities of Rawalpindi and Islamabad. Their dimensions were physically measured and total square area was calculated. Also the spaces around the dental unit were measured and recorded on graph paper. The measurements were analyzed using the SPSS 21 software.

**RESULTS:** The results showed that 72% of dental clinics had adequate space and did meet the recommended standards (American Dental Association Standards [ADA]), however only 40% percent of dental clinics had their dental units optimally placed and hence they failed to meet the ADA Standards. The results also showed that there is no correlation between the total area of a dental clinic and the placement of the dental unit.

**CONCLUSION:** The statistics have shown that although the majority of the dental clinics do have adequate space but still they failed to follow the recommended standards while placing their dental units in the operational clinical spaces. It is therefore recommended that the relevant government bodies should make and implement the policies in the best interests of both the dentists and the patients.

**KEY WORDS:** Dental Clinical Spaces, Dental Clinic Design

## CARDIORESPIRATORY FITNESS AND AGILITY LEVELS AMONG CLUB CRICKETERS OF RAWALPINDI AND ISLAMABAD

**Presenter:** Muhammad Shafay Ali

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**BACKGROUND:** Exercise and Sports, such as Cricket, has a positive effect on a person's Physical and Mental Health and are necessary to maintain a Healthy Lifestyle. In Cricket, Optimal performance depends on Cardiovascular Endurance, Agility and Skill. However, in Pakistan, Club Cricketers often lack comprehensive fitness training, focusing more on Skill-related aspects.

**OBJECTIVES:** Our study aims to assess the Cardiorespiratory Fitness and Agility Levels among the Club Cricketers of Rawalpindi and Islamabad, addressing a gap in literature, and forming a basis that aims to improve player performance.

**METHODS:** A descriptive cross-sectional study was conducted from May 2023 to June 2024 in the Cricket Clubs of Rawalpindi and Islamabad. Non-probability purposive sampling was used and a sample size of 344 was calculated using OpenEpi. Club Cricketers with age between 18-25 years with minimum 1 year of playing experience at the Club Level were included in our study. Whereas, participants with any medical condition/injury, and any history of doping or drug use or systemic illnesses were excluded. The data was collected by using 20-m Shuttle Test for CRF/ $VO_{2max}$  and T-Test for Agility Assessment. Collected data was then analyzed using SPSS version 26.

**RESULTS:** The Median Age was  $19\pm 3$  years. Out of 350 Participants, 57 (16.3%) had Very Poor  $VO_{2max}$ , 103 (29.4%) had Poor  $VO_{2max}$ , 68 (19.4%) had Below Average  $VO_{2max}$ , 63 (18%) had Average  $VO_{2max}$ , 51 (14.6%) had Above Average  $VO_{2max}$ , and 8 (2.3%) had Good  $VO_{2max}$ . Similarly, 308 (88%) had Poor Agility, 33 (9.4%) had Average Agility, and only 9 (2.6%) had Good Agility.

**CONCLUSION:** The Study concluded that Most Club Cricketers in Rawalpindi and Islamabad had Poor  $VO_{2max}$  and Agility Levels.

**KEYWORDS:** Club Cricketers, Cardiorespiratory Fitness,  $VO_{2max}$ , Agility

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## NORMATIVE VALUES OF VIBRATION PERCEPTION THRESHOLD USING NEUROTHESIOMETER AMONG HEALTHY ADULTS AND ITS COMPARISON WITH PATIENTS OF TRIGEMINAL NEURALGIA

**Presenter:** Mayya Firdous

**Authors:** Mayya Firdous, Dr. Quratulain Saeed, Dr. Sarfraz Jameel, Dr. Maria Firdous, Dr. Maryum Firdous

**Affiliations:** Foundation University College of Physical therapy, Foundation University Islamabad; Zubaida Khanum Medical Center Gujar Khan; Medical Officer at THQ, Gujar Khan

**BACKGROUND:** Vibration Perception Threshold is the lowest vibrational intensity to perceive the vibration stimuli. VPT is known to be impaired at an early stage in different neuropathies. Neurothesiometer is an instrument that measures VPT. In this study it is used as a screening tool for the trigeminal neuralgia by measuring VPT along the branches of the trigeminal nerve.

**OBJECTIVES:** To determine normative values for vibration perception threshold (VPTs) for trigeminal nerve using neurothesiometer in healthy adults, and compare vibration perception threshold (VPT) of face using neurothesiometer between the patients of trigeminal neuralgia and healthy adults.

**METHODS:** This cross-sectional analytical study was conducted at Zubaida Khanam Medical Center Gujar Khan within a time period of 3 months and 15 days. Data was collected from 20 healthy adults and 20 patients of trigeminal neuralgia. The inclusion criteria were 45 to 65 years participants of both genders. The exclusion criteria consist of individuals with brain tumors, any Psychiatry disorders, dental or surgical procedure, any musculoskeletal disorder of upper and lower extremity, pregnancy, history of ischemic heart disease and respiratory diseases. Data was collected using neurothesiometer. Specific points along the branches of the trigeminal nerve were marked. Probes were placed on these points and three readings of VPT were noted for each branch. The device graduates in vibration intensity ranges from 1-50Hz. Normative values were calculated using average for each nerve branch and then for particular trigeminal nerves. Procedure was repeated for contralateral nerves as well. VPT was also calculated in patients of trigeminal neuralgia and their means were compared from healthy adults.

**RESULTS:** There was no significant difference between normative values of VPT between right ( $10.4 \pm 1.4$ ) and left ( $10.6 \pm 1.7$ ) trigeminal nerves ( $p$  value = 0.733) in healthy adults. This study found that VPT was statistically greater ( $p$  value= 0.000) in patients of trigeminal neuralgia ( $14.0 \pm 1.3$ ) compared with healthy adults ( $10.5 \pm 1.5$ ). Normative values range of trigeminal nerves for healthy adults was 7.50Hz-12.6Hz whereas among patients was 12.30Hz-16.90Hz.



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**CONCLUSION:** Patients of trigeminal neuralgia have higher vibration perception threshold on neurothesiometer. This can help in screening and management of trigeminal neuropathy.

**KEYWORDS:** Trigeminal Neuralgia, Neurothesiometer, Vibration Perception Threshold (VPT)

## FREQUENCY OF MENOPAUSAL SYMPTOMS AND LEVELS OF PHYSICAL ACTIVITY IN MENOPAUSAL FEMALES

**Presenter:** Laiba Faran

**Authors:** Laiba Faran, Somia Younus, Namra Nazir, Samreen Ali, Zainab Noor Shiekh

**Affiliation:** Foundation University College of Physical therapy, Foundation University Islamabad

**BACKGROUND:** Menopausal symptoms can be severely challenging for a woman in her midlife affecting her overall quality of life. Physical activity can have an impact on the severity of the menopausal symptoms and could be used as an intervention in place of hormonal therapy that can have long-term deleterious results.

**OBJECTIVES:** The objective of this study is to determine the frequency of menopausal symptoms and the physical activity levels in menopausal females in Pakistan.

**METHODS:** A Descriptive Cross-sectional Study was conducted in 384 participants of age 45 – 60 years old menopausal women from the general community in Rawalpindi. Data was collected through Menopause Rating Scale (MRS) for Menopausal-related symptoms and International Physical activity Questionnaire (short form) to assess the PA levels. The data was analyzed statistically using SPSS.

**RESULTS:** The results show that 52.2% of women (n=201) are asymptomatic while 47.8% of women (n=184) experiencing "Mild-to-moderate" severity of these menopausal symptoms by using MRS. Psychological symptoms were observed to be the most prevalent symptoms with a percentage of 74.72%. Somato-vegetative symptoms were reported by 66.16% of the study participants with joint and muscular discomfort being the most common (81.8%). The least prevalent symptom category was the urogenital (28.03%) with bladder problems being reported the most in this category (45.7%) The levels of physical activity through IPAQ – SF reported that 17.7% of women (n=68) have LOW level of PA, 28.6% of women (n=110) have moderate levels of PA and 53.8% of women (n=207) having high levels of Physical Activity in menopausal women aged between 45 to 60 years of age.

**CONCLUSION:** The study concludes that the majority of the menopausal women were asymptomatic and reported high levels of physical activity.

**KEYWORDS:** Menopause, Menopausal-related symptoms, Physical activity Levels, International Physical Activity Questionnaire.

## ACADEMIC TRANSITIONAL ISSUES OF ADOLESCENTS WITH AUTISM SPECTRUM DISORDERS: A QUALITATIVE INQUIRY

**Presenter:** Saleha Bibi

**Author:** Saleha Bibi, Najam Us Sahar

**Affiliation:** Fatima Jinnah Women University

**BACKGROUND:** Academic transitional issues are those issues which are faced by ASD adolescents when they are moving from one school to another, moving from school to college or one class to another.

**OBJECTIVES:** The present study was conducted to explore the academic transitional issues faced by adolescents with the diagnosis of autism spectrum disorders.

**METHODS:** Data about study variables was collected qualitatively, from mental health professionals having expertise in the field of autism, using structured interview protocols. Questions of the interview guidelines were carefully formulated with the help of experts. Inclusion and exclusion criteria were established before the conduction of the study. Mental health professionals were individually approached. After taking informed consent, interviews were started.

**RESULTS:** During thematic, different themes were generated. Categories having the same responses were formed and common themes were dug out from interview content. Mental health professionals reported that academic transition brings a lot of change in the daily lives of ASD adolescents. They also reported that adjustment to the new environment is the most difficult task for ASD adolescents. They are accustomed to their fixed routine. Any change in which disturbs them mentally and emotionally. Mental health professionals viewed the competition at academic places as a most disturbing factor for ASD youth. They cannot compete like typically growing children. Stress resulting from the academic competition makes ASD adolescents more prone towards developing symptoms of anxiety and depression.

**CONCLUSION:** Our study concludes that most of the adolescents diagnosed with ASD suffer from academic transitional issues including stress, anxiety, sensory overload, executive functioning issues, communication issues and lack of teacher support. Hence, it is recommended that special needs schools and administrators make some transitional readiness programs to facilitate student's transitional processes.

**KEYWORDS:** Academic transitional issues, sensory overload, executive functioning, communication issues.

## COMPARING THE DIAGNOSTIC ACCURACY AND MANAGEMENT PLAN OF CLINICAL PSYCHOLOGISTS AND LARGE LANGUAGE MODELS IN TERMS OF MENTAL HEALTH DISORDERS

**Presenter:** Shahab Afridi

**Authors:** Shahab Afridi, Bakhtmeena Nizam, Aamenah Rustam, Sibgha Iftikhar, Noor Ul Ain, Eman Bibi, Mueed Iqbal, Eman Nadeem, Sarmad Nazir

**Affiliation:** Ayub Medical College

**BACKGROUND:** Considering the tendencies of AI development in health care, especially in emotion detection and mental health risk assessment, it is vital to investigate how the range of Large Language Models (LLMs) can affect the diagnosis and treatment compared to human mental health professionals.

**OBJECTIVES:** The objective of our study is to assess the diagnostic accuracy of LLMs and Clinical Psychologists, as well as, to compare the diagnosis and management plan of LLMs with Clinical psychologists.

**METHODS:** A total of 136 de-identified case reports with all required data including diagnosis and treatment plan were included. Diagnosis of those case reports were extracted as primary diagnosis. To set a gold standard for comparison, all 133 case reports were presented to three clinical psychology experts for inter-rater reliability. The diagnosis on which all three raters agreed were considered the gold standard diagnosis. Five Large language models (LLMs) including Chat GPT 4o, Chat GPT 3.5, Gemini, Claude, and Perplexity were utilized in this study. Data from each case report was inserted as a prompt into each of the five LLMs. Results from LLMs and Clinical psychologist (primary diagnosis) were matched separately with gold standard diagnosis. Diagnosis and management plan of LLMs and Clinical psychologists were also compared separately.

**RESULTS:** Out of 133, 106 case reports with gold standard diagnosis were presented to each LLM. Chat GPT 4o and Chat 3.5 both matched in 87(81%) cases, Claude matched in 86(81%), Gemini matched in 76(72%), Perplexity scored 74(70.66%), while they matched in only 71(66.66%) cases. Notably, ChatGPT 4o and Chat GPT 3.5 achieved the highest diagnostic accuracy among all performers. Primary Diagnosis of clinical psychologists were also directly matched with generated diagnosis of LLMs. Out of 106 generated responses, 54(51.5%) diagnosis by Chat GPT 4o and Chat GPT 3.5, 59 (55.3%) by Claude, 46(43.7%) by perplexity and 52.47(49.5%) were exactly concordant with primary diagnosis by Clinical psychologists. Management plans were compared in responses with concordant diagnosis. Management

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plans of Chat GPT 4o, Chat GPT 3.5, Claude and Perplexity were moderately matching with Clinical psychologist while Gemini has shown poorly matching.

**CONCLUSION:** Our study concludes that Artificial intelligence shows a high potential for induction into health care management. A much refined and customized AI system can be utilized in dealing with mental health disorders.

**KEYWORDS:** Artificial Intelligence, Diagnosis, Management, Clinical Psychology, Mental Health

## ASSESSMENT OF AWARENESS, ATTITUDE, KNOWLEDGE, AND APPLICATION TOWARDS DENTAL ERGONOMICS AND MUSCULOSKELETAL DISORDERS AMONG DENTAL STUDENTS IN RAWALPINDI

**Presenter:** Sameen Shakeel

**Authors:** Sameen Shakeel, Fizza Batool, Ammar Abdullah Malik

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad

**BACKGROUND:** Dental ergonomics, a specialized field focused on optimizing the dental workplace, plays a crucial role in preventing musculoskeletal disorders (MSDs) and ensuring the long-term well-being of dental professionals. Proper ergonomic practices are essential to minimize the physical strain associated with dental procedures, which can lead to MSDs over time.

**METHODS:** A comprehensive cross-sectional survey was conducted to evaluate the awareness, attitude, knowledge, and application of dental ergonomics principles among house officers and final-year dental students in Rawalpindi, Pakistan. The survey aimed to gauge participants' understanding of ergonomics and its relevance to daily clinical practice. The collected data were subjected to detailed statistical analysis to derive meaningful insights into the participants' perspectives and practices.

**RESULTS:** The survey revealed that 67.8% of the participants were aware of dental ergonomics, indicating a moderate level of awareness among the target group. However, only 32.2% of the respondents had attended a course or workshop specifically focused on dental ergonomics, highlighting a gap in formal education and training. Despite this, a significant majority, 84.6%, believed that ergonomic practices would enhance their daily clinical performance, underscoring the perceived importance of ergonomics in dental practice. Additionally, 88.5% of the participants recognized that the operator's chair/position and the patient's chair/position play a critical role in the development of musculoskeletal disorders.

**CONCLUSIONS:** The findings suggest that while dental students and house officers in Rawalpindi exhibit a reasonable awareness of dental ergonomics, there is a clear deficiency in attending educational seminars or workshops dedicated to ergonomic principles in dentistry. This gap in formal education may impede the effective application of ergonomic practices in clinical settings, potentially increasing the risk of musculoskeletal disorders among dental professionals. To address this, it is recommended that dental curricula incorporate comprehensive training on ergonomics to better prepare future practitioners for the physical demands of their profession.

**KEYWORDS:** Dental ergonomics, Musculoskeletal disorders, Awareness, Attitude, Knowledge, Application, Dental students, Rawalpindi

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**CAN ARTIFICIAL INTELLIGENCE-DRIVEN DETECTION OF INTERPROXIMAL BONE LOSS IN ANTERIOR TEETH SURPASS HUMAN ACCURACY? A PANORAMIC STUDY USING ADVANCED RADIOGRAPHIC ANALYSIS**

**Presenter:** Moeeza Awan,

**Authors:** Moeeza Awan, Tehreem Ayesha, Muhammad Umair

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**BACKGROUND:** Artificial Intelligence (AI) has been in high demand due to its accuracy, efficiency and extensive implementations, particularly in healthcare practices such as dentistry. This study proposed a Convolutional Neural Network (CNN) algorithm to detect interproximal bone levels and calculate radiographic bone loss using periapical radiographs.

**OBJECTIVES:** The primary objective of this study was to train and utilize an AI-driven software, You Only Look Once v8 (YOLOv8), to accurately and precisely detect and calculate bone loss levels in anterior teeth, and then correlate these findings with conventional periodontal probing.

**METHODS:** This research was conducted at the Foundation University College of Dentistry & Hospital (FUCD&H). Patients reporting to the Oral Medicine Department at FUCD&H were randomly selected for sampling. The calculated sample size consisted of 30 patients, whose anterior teeth were thoroughly examined through probing and clinical assessment. Data was collected manually through detailed history, clinical pictures, periodontal probing and periapical radiographs of patients' anterior teeth. The collected data was digitized and uploaded in standard image formats (e.g., PNG, JPEG, DICOM) to YOLOv8 software, which analyzed the images to determine the difference between existing and normal bone levels, thereby calculating the bone loss percentage. The study considered independent variables such as patients' age, gender, habits, systemic diseases and dental history. The dependent variable was the bone loss level in patients' anterior teeth. The independent variables were anticipated to influence the dependent variable.

**RESULTS:** The dataset was randomly segmented into three distinct cohorts for the training, validation and testing of the software. Bone level detection was carried out individually for each anterior tooth, ensuring a precise and comprehensive analysis. The study included a calculated sample size of 120 radiographs taken from 30 patients, whose anterior teeth were examined through probing and radiographic analysis across all four quadrants. Interproximal bone loss between the central incisors, lateral incisors and canines was assessed. After excluding sites who did not meet the inclusion criteria, the final sample size comprised 340 interproximal spaces. The software, utilizing the provided dataset, demonstrated an accuracy of 86%



in comparison to manually computed values. This performance indicated potential for further improvements through additional training and algorithmic refinement.

**CONCLUSION:** This study underscored the efficacy of AI-based software YOLOv8, in accurately detecting bone loss levels in anterior teeth using periapical radiographs and clinical pictures. The findings from this research highlighted the transformative impact of AI in dentistry, paving the way for its broader adoption in clinical settings.

**KEY WORDS:** Bone Loss, YOLOv8, AI in Dentistry, Anterior teeth, Periodontal Disease

## SPECTRUM OF ANTIFUNGAL DRUG RESISTANCE IN CANDIDIA SPECIES ISOLATES IN PAKISTAN IN THE LAST DECADE (2014-2024)

**Presenter:** Zainab Asim Butt

**Authors:** Laiba Saeed, Zainab Butt, Hammad Saleem and Dr Seemi Salman

**Affiliation:** Margalla Institute of Health Sciences

**BACKGROUND:** Antifungal drug resistance is an emerging problem with a huge disease burden worldwide according to the World Health Organization. In Pakistan, around three million people suffer from fungal diseases with a predicted mortality rate of 10-75% per annum.

**OBJECTIVE:** In order to have a better picture of research work and ground realities, this study was planned to study the range of antifungal drug resistance in Candida species isolated in different laboratories of Pakistan.

**METHODS:** A detailed review of online available literature was done, according to PRISMA guidelines and three databases were included. Original research articles from PubMed Home, Science direct, and Google scholar were searched from the past ten years, i.e. 2014- 2024. MeSH words like “candidiasis”, “antimicrobial drug resistance”, “Pakistan” were searched with the use of Boolean terms “AND” and “OR” in between them. Titles and abstracts of the articles were retrieved and studied in the first round, while full-texts were reviewed in the second round. Finally, a total of nine articles were selected following the inclusion criteria.

**RESULTS:** The study reported that candida albicans species was dominant among fungal isolates (69%). Progression in antifungal drug resistance (6% to 34%) has been observed against candida albicans as well as non-candida albicans species. Highest resistance was observed against Fluconazole (85%).

**CONCLUSION:** Candida species possess high resistance against antifungal agents. Identification of resistant strains and innovations in the form of new drugs are gateways to combat antifungal drug resistance.

**KEY WORDS:** Antifungal drug resistance; Candidiasis; Pakistan

## ANTHROPOMETRIC INSIGHTS: COMPARING HAND AND FACIAL MEASUREMENTS FOR OCCLUSAL VERTICAL DIMENSION (OVD) ASSESSMENT

**Presenter:** Zuhayr Arif Jabbar Khan

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**BACKGROUND:** Accurate assessment of OVD is essential for successful dental treatments, and various methods have been developed to measure it, including anthropometric techniques. Among these, the length of the index finger (LIF) and the distance from the inner canthus of the eye to the outer corner of the lip have emerged as promising non-invasive landmarks due to their stability and reproducibility across different individuals. Previous studies have suggested a positive correlation between these anthropometric measurements and OVD; however, local research on these relationships remains limited.

**OBJECTIVES:** This study investigates the correlation between two anthropometric measurements; length of the index finger (LIF) and the distance from the inner canthus of the eye to the outer corner of the lip with occlusal vertical dimension (OVD) in dentate subjects.

**METHODS:** This is a cross sectional study to be conducted on 150 participants, all exhibiting bilateral occlusal stops on natural posterior teeth according to a specific selection criteria. Measurements of OVD, LIF, and the eye-lip distance were obtained using digital vernier calipers for both males and females, with data recorded on a self-made performa.

**RESULTS:** At this point in time, a total of 63 participants, aged 18-60 years (28 males and 35 females), have been included in this study. Analysis of facial and hand measurements revealed strong correlations with both occlusal vertical dimension and gender ( $p < 0.01$ ).

**Conclusion:** This study is still underway, and the final results/conclusion shall be presented at the conference.

**KEY WORDS:** Anthropometric, Occlusal vertical dimension, Index finger, Facial landmarks, Inner canthus of eye.

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## OCCURRENCE OF MYOFASCIAL TRIGGER POINTS IN QUADRATUS LUMBORUM AND ERECTOR SPINAE MUSCLES IN FEMALES WITH DYSMENORRHEA

**Presenter:** Esha Zia

**Authors:** Esha Zia, Faiqa Noor, Aayla Riaz, Faareha Hasan, Hamna Nawab, Anam Rehman

**Affiliation:** Foundation University College of Physical Therapy, Foundation University Islamabad

**BACKGROUND:** Despite evidence indicating that individuals with dysmenorrhea experience heightened muscle tension and discomfort in the lumbar region, there is little known about the precise occurrence and impact of myofascial trigger points in the region.

**OBJECTIVES:** This study seeks to fill in the aforementioned research gap by development of targeted interventions and holistic management strategies for individuals with dysmenorrhea and thus, improve patient outcomes.

**METHODS:** Our study, carried out between May 2023 and June 2024 investigated the frequency of MTrPs in the ES and QL muscles in individuals with dysmenorrhea. Participants were asked to fill out a consent form, a self-structured questionnaire including demographics and general menstrual history, and then the WALIDD form for dysmenorrhea. Lastly, a physical examination was performed manually palpating the ES and QL muscles for MTrPs. Students, and other individuals in the locale aged 13-30 years were approached in colleges and universities as well as the general community.

**RESULTS:** The intensity rating according to the WaLIDD score revealed that 51.6% had moderate intensity of dysmenorrhea whereas 24.5% and 24% had severe and mild severity, respectively. Manual palpation for MTrPs revealed that there were more subjects with latent MTrPs (N=66) than active MTrPs (N=62). Active MTrPs were highest in the right quadratus lumborum muscle in females with moderate intensity of dysmenorrhea (N=22). Latent MTrPs were the highest in the right erector spinae muscle in females with moderate intensity of dysmenorrhea (N=19).

**CONCLUSION:** The analysis of our findings revealed a higher percentage of individuals with moderate intensity of dysmenorrhea. The occurrence of Myofascial trigger points was generally prevalent across both palpated muscles in females with dysmenorrhea. MTrPs were present in a total of 115 females out of 384. A greater number of females had MTrPs in the QL muscles compared to the ES. Latent MTrPs were revealed to be more common than active ones.

**KEYWORDS:** Dysmenorrhea, Myofascial Trigger Points, Quadratus Lumborum, Erector Spinae

## COMPARISON OF CORE ENDURANCE BETWEEN INDIVIDUALS WITH AND WITHOUT LOWER CROSSED SYNDROME

**Presenter:** Areeka Riasat

**Authors:** Esha Chaudhary, Areeka Riasat, Tehreem Zahra, Parsa Saghir

**Affiliation:** Foundation University College of Physical Therapy, Foundation University Islamabad

**BACKGROUND:** Lower crossed syndrome (LCS) is characterized by muscle imbalance between tight hip flexors and erector spinae and weak abdominals and gluteus muscles. LCS could be due to sedentary lifestyle, prolonged sitting and lack of exercise that could affect the core endurance.

**OBJECTIVES:** The purpose of our study was to assess the core endurance in individuals with lower crossed syndrome and in healthy individuals.

**METHODS:** This comparative cross-sectional study was carried out from February 2023 to January 2024 with a total sample size of 158 (aged 19-30) collected through purposive sampling technique. Written consent was obtained from the participants before participation. McGill's core endurance battery was used to measure the core endurance of both groups Analysis was done using SPSS version 21.1.1

**RESULTS:** The total sample collected in this study was  $n= 158$ , with mean age of  $21.81 \pm 2.43$  years. Our study showed that for individuals with LCS, mean trunk flexor endurance time was  $12.38 \pm 8.36$  seconds, trunk extensor endurance time was  $6.73 \pm 4.92$  seconds. For the right lateral endurance, it was  $3.89 \pm 2.61$  and  $3.87 \pm 3.0$  for left lateral endurance. Whereas for individuals without LCS, mean trunk flexor endurance time was  $14.67 \pm 11.69$  seconds, trunk extensor endurance time was  $9.35 \pm 8.62$  seconds. For the right lateral endurance, it was  $7.67 \pm 7.58$  and  $7.26 \pm 7.73$  for left lateral endurance.

**CONCLUSION:** This study concluded that there are significant differences regarding the measured core endurance for extensor, left lateral and right lateral endurance tests between the healthy group and the lower cross group ( $p < 0.05$ ) and there was no significant difference in flexor endurance ( $p \geq 0.05$ ) between individuals with and without lower crossed syndrome.

**KEYWORDS:** Cross-Sectional Study, Muscle Weakness, Abdominal Muscles, Physical Endurance, Low Back Pain.

## FALL RISK AMONG PERSONS WITH TYPE II DIABETES MELLITUS AS COMPARED TO HEALTHY CONTROLS

**Presenter:** Zaha Asif

**Authors:** Ujala Mansoor, Zaha Asif, Afifa Shabbir, Muneeba Ali, Areesha Shehzadi

**Affiliation:** Foundation University College of Physical Therapy, Foundation University Islamabad

**BACKGROUND:** Diabetes mellitus type II is often associated with obesity, sedentary lifestyle and atypically develops into adulthood. Previous studies show that in elderly diabetic population, there is an increased risk of fall. However, there is a lack of studies that show the changes in balance and fall risk that are developing during the middle age.

**OBJECTIVE:** The objective of this study was to determine the risk of fall among middle aged persons that have diagnosed type II diabetes mellitus in comparison to healthy individuals.

**METHODS:** Cross-sectional comparative study was performed from May 2023 to June 2024 in Fauji Foundation Hospital (FFH). A total of 385 participants were recruited by applying non-probability convenient sampling techniques, among which 193 were diabetic and 192 were non-diabetic with age ranging 45-64, male and female with diabetes mellitus type II for more than 5 years. The Timed up and go test (TUG), 5 times sit to stand test (5STS), functional reach test (FRT) and single leg stance test with eyes open and closed (SLS) were used to assess the risk of fall among the participants in both groups. Data analysis was done using SPSS version 21.

**RESULTS:** Statistically significant results were obtained ( $p < 0.05$ ) using TUG test ( $p = 0.00$ ), 5STS ( $p = 0.00$ ), FRT ( $p = 0.009$ ), SLS with eyes open (right and left side,  $p = 0.00$ ), SLS with eyes closed (right side;  $p = 0.00$ , left side;  $p = 0.027$ ), between diabetic and non-diabetic groups. Therefore, there was a statistically significant increased fall risk in the diabetic participants.

**CONCLUSIONS:** According to the tests performed to analyze the fall risk i.e. TUG, 5STS, FRT, SLS with eyes open and closed (right and left sides) among diabetic and non-diabetic participants, there is increased risk of fall in diabetics as compared to the non-diabetic healthy controls.

**KEYWORDS:** Fall risk, Diabetes Mellitus

## FREQUENCY OF LATERAL EPICONDYLITIS IN THE HOUSEWIVES OF RAWALPINDI AND ISLAMABAD

**Presenter:** Seher e konain

**Authors:** Seher e konain, Aimen Fatima, Shanza Ishfaq, Mehwish Shahzadi

**Affiliation:** Foundation University College of Physical Therapy, Foundation University Islamabad

**BACKGROUND:** Lateral epicondylitis is a common overuse syndrome which affects the common extensor tendon of the elbow joint. The nature of household chores of housewives is similar to the phenomenon of overuse as they perform tasks in which there are repetitive movements of wrist and hand. Individuals with lower SES often face barriers such as limited access to health care, reduced availability of preventive and rehabilitative services that increase the risk of repetitive strain injuries.

**OBJECTIVES:** To find the frequency of the LE in housewives belonging to Rawalpindi and Islamabad and to evaluate the relationship of prevalence of lateral epicondylitis with socioeconomic statuses of rural and urban areas.

**METHODS:** A cross-sectional review was carried out in Rawalpindi and Islamabad from May 2023 to June 2024. 384 participants were selected via non probability quota sampling technique. Patient Rated Tennis Elbow Evaluation Questionnaire and special tests for Lateral epicondylitis were used for data collection. With SPSS version-21, data analysis was done.

**RESULTS:** Out of the total 384 housewives enrolled, 68 had lateral epicondylitis disability present according to Subjective tool (PRTEE). Whereas, according to the special tests lateral epicondylitis is present in 141 participants. Results showed that LE presence is more in urban population than rural population. LE is most likely to be present in lower class housewives of urban and rural areas.

**CONCLUSIONS:** It is concluded that housewives belonging to urban areas are more likely to be affected by LE as compared to the same population of rural areas. Whereas women belonging to lower SES are more affected in both rural and urban populations of housewives.

**KEYWORDS:** Patient Rated Tennis Elbow Evaluation Questionnaire (PRTEEQ), Lateral epicondylitis, Socioeconomic status



## KNOWLEDGE AND PERCEPTION OF BREASTFEEDING AMONG UNIVERSITY STUDENTS OF TWIN CITIES: CROSS-SECTIONAL STUDY

**Presenter:** Manahel Azhar

**Authors:** Manahel Azhar, Mahnoor Aslam

**Affiliation:** Department of Nutrition and Dietetics, National University of Medical Sciences

**BACKGROUND:** According to The World Health Organization (WHO) and United Nations Children's Fund (UNICEF), Exclusive breastfeeding is defined as feeding the infant only breast milk, with no supplemental liquids or solids except for liquid medicine and vitamin/mineral supplements. Breastfeeding is an important public health strategy for improving infant and child morbidity and mortality, improving maternal morbidity, and helping to control health care costs.

**OBJECTIVES:** To assess the knowledge and perception of breastfeeding among university students of twin cities.

**METHODS:** A cross-sectional study was conducted from February to July 2024. A sample of 126 students (aged 18-35 years) were selected using a convenient sampling technique from the universities of Rawalpindi and Islamabad. An online self-constructed questionnaire was used to collect data about socio demographic details, knowledge, and perception of breastfeeding. Data was analyzed using a descriptive analysis test through SPSS version 20.

**RESULTS:** A total of 126 participants out of which 112 (88.9%) were females and 14 (11.1%) were males participated in this study. 49.2% were students of Medical/health sciences. 63.5% of participants had heard of the term "Exclusive breastfeeding". 66.7% agreed on the composition of breastmilk composition change by mother's diet, 21.4% did not agree and 11.9% chose don't know. 61.9% of participants believed that breastmilk is a complete food for the baby up to 6 months while the rest disagreed. 77% disagreed that cow milk is as good as mother milk. 65.9 % agreed that bottle feeding can lead to infections in the baby. 23% agreed that water and milk can be given to newborn babies. 29.4% agreed that giving pre-lacteal immediately after birth to a baby is good for the baby's health while 47.6% disagreed.

**CONCLUSION:** There is a great scope for improving adolescents' knowledge of breastfeeding in colleges. These findings may help design interventions that need to improve exclusive breastfeeding. Counseling programs both at the community and individual level to promote exclusive breastfeeding practices are needed, which should significantly increase EBF practice, reduce infant morbidity and mortality rates, and help to achieve SDG-3.

**KEYWORDS:** Breastfeeding, Public health.

## PREVALENCE OF DRY SOCKET IN DIABETIC PATIENTS

**Presenter:** Muhammad Nawfal Sahi

**Authors:** M.Nawfal Sahi, Arooj Aslam, Maidah Hanif

**Affiliation:** Foundation University College of Dentistry, Foundation University Islamabad

**BACKGROUND:** Dry socket (Alveolar osteitis) occurs when a blood clot is lost post-extraction, causing severe pain, exposed bone, necrotic debris, and bad breath. Contributing factors include age, gender, diabetes, smoking, and the condition of the extracted teeth.

**OBJECTIVES:** To determine the prevalence of dry socket in Diabetic patients and its associated risk factors.

**METHODS:** A total of 499 diabetic patients who underwent tooth extractions were included. Data was collected for gender, age, number of visits, and type of extraction, endodontic status, smoking history, and blood sugar levels (BSR) at extraction. Statistical analyses, including chi-square tests and t-tests, were conducted to determine the associations between these factors and the occurrence of dry socket.

**RESULTS:** Out of 499 diabetic patients, 83 (16.6%) developed dry socket. The condition occurred more frequently in females (88%) than males (12%). Most patients with dry socket had two visits (83.1%). The mean age of patients with dry socket was 47.92 years. Dry socket was more common in non-surgical extractions (92.8%) compared to surgical extractions (7.2%). Non-root canal treated teeth had a higher incidence of dry socket (89.2%). A significant association was found between smoking and dry socket, with 36.1% of smokers developing the condition. The mean BSR for patients with dry socket was 188.42 mg/dl.

**CONCLUSIONS:** The prevalence of dry socket in diabetic patients was significantly associated with the number of dental visits, smoking history, and elevated blood sugar levels. These findings highlight the importance of managing blood sugar levels and smoking cessation in reducing the risk of dry socket in diabetic patients.

**KEY WORDS:** Dry Socket, Diabetes, Blood Clot, Blood Sugar Random, Smoking

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## THE RELATION BETWEEN PERSONALITY TRAITS AND ACADEMIC SUCCESS: A CORRELATION STUDY ON THE DENTAL STUDENTS AT FUCD

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**BACKGROUND:** The relationship between academic scores and personality traits has been a subject of extensive research in the field of educational psychology. The academic success of students is not only an indicator of their hard work and commitment but also of institutional effectiveness. Academic achievement is often evaluated against a spectrum of cognitive factors like intelligent quotient and other non-cognitive factors such personality traits, socioeconomic background, family histories etc.

**OBJECTIVES:** This research aims at studying the relationships between personality traits and academic achievement among the dental students at Foundation University, College of Dentistry, Islamabad. This can serve as a potent stimulator for making progressive changes in our educational system to facilitate the students in achieving their full potential, both personally and professionally.

**METHODS:** A quantitative research design was used where all the four years of dental students were invited to complete the personality measure using the Ten Item Personality Inventory (TIPI) scale and were asked to provide their recent professional examination score. The TIPI consists of ten items, two items measuring each of the Big Five qualities. Each statement is rated by respondents on a 7-point Likert scale, ranging from 1 "strongly disagree" to 7 "strongly agree." Out of 113 students who participated, only 103 responses were included in the analysis due to incomplete information in the remaining submissions. Among the 103 participants, 85 were female and 18 were male. The statistical analysis was done on the SPSS, Version 21.

**RESULTS:** A correlation was observed between the student's personality scores and their academic scores. There is a significant positive relationship between academic scores and conscientiousness,  $r(101) = 0.27$ ,  $p=0.006$ . There were no gender differences among the participants in any of the personality traits. There were no gender differences among the participants in any of the personality traits.

**CONCLUSION:** This study was consistent with many other researches considering conscientiousness as the most reliable predictor of academic performance (Wagerman & Funder, 2007). While intelligence and other cognitive skills certainly play a part in academic performance, it is crucial to encourage conscientious attitudes and behaviors in our institute as it significantly improves academic performance and ensures long-term educational success.

**KEYWORDS:** Personality Traits, Academic Success, Conscientiousness, Big Five Personality Model, Dental Students



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