



UMT

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Editor in Chief:

Prof Dr Ejaz Ullah Cheema

Editorial Board:

Dr. Sarah Rehman (Member)

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Ms. Asra Shanzeah (Member)

Designed By:

Ms. Raeesa Ahmad



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EDITORIAL

Dear Readers,

It is my great pleasure to present to you the latest issue of our School of Pharmacy Quarterly Newsletter which highlights various achievements and milestones of our school showcasing our commitment to excellence in pharmacy education, research and community engagement.

The successful organisation of the first International Healthcare Conference on Healthcare Challenges and Innovations, signing of MOU with reputed academic institutions, conduction of the White Coat Ceremony for new students, conferment of the Dean's Merit Awards to meritorious students of the school, organization of the first Inter-University Poster and Debate Competition and publication of the new issue of the School's CPR Journal are some of the key activities of the school featured in this newsletter.

I hope this edition will leave you inspired by the commendable work done by the faculty and students of school of pharmacy.

Kind regards

Prof. Ejaz Cheema
Editor-in-Chief
Founding Dean SPH-UMT



News in Brief

1-UMT, School of Pharmacy, Organized its first International Conference on Healthcare Challenges and Innovations in 21st Century" HCIC 2025 on 28th and 29th January 2025.

2-SPH is pleased to announce the Successful publication of Volume 2, Issue 2 of it's Peer-Reviewed Journal Showcasing the Cutting-Edge research in Pharmaceutical Sciences.

3-UMT School of Pharmacy Hosts Inaugural Inter-University Debate and poster competition.

4-UMT School of Pharmacy and IPS UVAS Forges Strategic Alliance to Boost Research Collaboration and Innovation in Pharmaceutical Sciences.

SPH Activities

Orientation of Batch 2024 at the UMT School of Pharmacy

UMT School of Pharmacy held its highly anticipated Orientation Ceremony, warmly welcoming Batch 2024 with an inspiring mix of informative sessions and heartfelt speeches. The event underscored the school's commitment to fostering academic excellence, community, and innovation in pharmaceutical sciences. With engaging activities and interactive sessions, new students were introduced to the vibrant campus culture and the abundant opportunities that lie ahead.

The Dean's motivational address emphasized the importance of unity and perseverance as the cornerstone for future success, setting a positive tone for a transformative academic journey.



Seminar on Dastak

Mr. Faisal Mumtaz, Joint Director of the Punjab IT Board, delivered an engaging and insightful session on the transformative "Dastak" initiative. In his presentation, he detailed how the program is revolutionizing the delivery of public services by leveraging cutting-edge technology and fostering inter-departmental collaboration. Mr. Mumtaz highlighted the initiative's significant impact on streamlining citizen interactions and enhancing efficiency within government services, inspiring attendees with a clear vision of digital transformation in the public sector.

The session not only underscored the innovative approach behind "Dastak" but also reinforced the commitment to making essential services more accessible to every citizen.



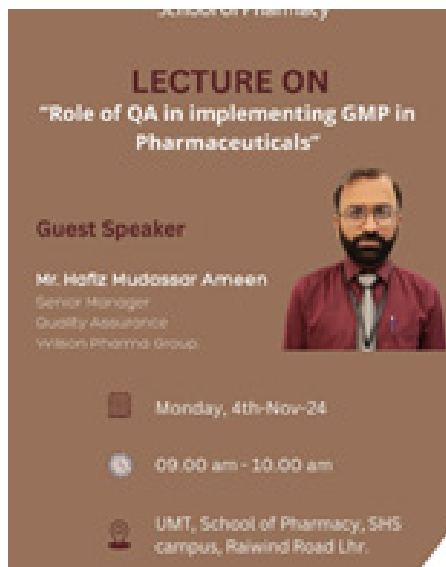
LASA (Look-Alike Sound-Alike) Drugs Identification Activity

In our recent class activity, students engaged in a hands-on session focused on identifying Look-Alike, Sound-Alike (LASA) drugs. They examined subtle differences in medication packaging, labeling, and names. Through practical demonstrations and group discussions, the students compared similar-looking drug samples, identified potential sources of confusion, and developed strategies to prevent medication errors. This interactive exercise not only enhanced their observational and critical-thinking skills but also underscored the vital role of accuracy in ensuring patient safety.



Guest Lecture on Role of QA in Implementing GMP in Pharmaceuticals

SPH organized a lecture on the critical role of Quality Assurance (QA) in implementing Good Manufacturing Practices (GMP). The session highlighted how QA serves as the backbone of pharmaceutical manufacturing by ensuring product safety, efficacy, and adherence to regulatory compliance. Attendees learned that QA is responsible for meticulously monitoring every stage of the manufacturing process, from raw material sourcing and production to final product release. Through rigorous documentation and systematic oversight, QA teams help maintain high-quality standards and identify potential issues before they escalate. This proactive approach not only safeguards patient health but also reinforces trust in the pharmaceutical industry by consistently delivering products that meet both internal and regulatory benchmarks.



Guided Library Sessions

Empowering minds, one book at a time! In our engaging guided library sessions hosted by Dr. Amber Sharif, students were encouraged to dive deep into a vast array of resources, honing their research skills and learning to navigate the extensive world of knowledge available at their fingertips. These sessions not only foster a love for reading but also equip learners with critical information literacy skills, enabling them to evaluate sources, synthesize information, and develop independent thinking, cornerstones of academic success and lifelong learning.



Seminar on Biotechnology in Pharmaceutical Products & Challenges

The UMT School of Pharmacy successfully hosted an insightful seminar on “Biotechnology in Pharmaceutical Products & Challenges”, featuring Dr. Rizwan Mahmood as the distinguished guest speaker. Dr. Mahmood, a highly respected pharmaceutical expert with a PhD from the UK, shared his extensive experience in production, quality assurance, and research & development from leading pharmaceutical organizations, including Rhone Poulenc, GlaxoSmithKline, Highnoon, and CCL Pharmaceuticals.

During the seminar, Dr. Mahmood delved into the transformative role of biotechnology in modern pharmaceuticals, emphasizing its impact on drug discovery, personalized medicine, and the development of biologics. He highlighted key challenges, such as regulatory hurdles, ethical concerns, and the need for advanced manufacturing technologies. Through engaging discussions, he provided real-world case studies and solutions to overcome these obstacles, offering valuable insights to students and faculty members.

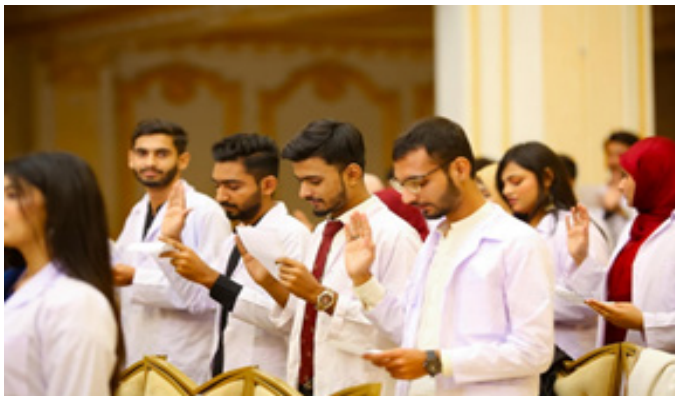


Oath taking Ceremony and Dean Award

The Oath-Taking Ceremony and Dean's Award event at the UMT School of Pharmacy was a momentous occasion celebrating the dedication, excellence, and commitment of aspiring pharmacists. The ceremony commenced with an inspiring address by the Dean, emphasizing the profound responsibilities that come with the profession and the ethical standards that every pharmacist must uphold.

During the Oath-Taking Ceremony, students solemnly pledged to maintain integrity, serve humanity, and contribute to the advancement of pharmaceutical sciences. This symbolic moment reinforced their dedication to ethical practice, patient care, and lifelong learning.

The event also honored outstanding students with the Dean's Award, recognizing their academic excellence, leadership, and contributions to research and community service. Award recipients were applauded for their perseverance and achievements, serving as an inspiration for their peers. The event included various entertainment segments as well.



Pharma Forum

The Pharma Forum Inter-University Debate and poster Competition, organized by the UMT School of Pharmacy, was a dynamic platform where students from various institutions engaged in thought-provoking discussions on critical pharmaceutical and healthcare topics. This intellectually stimulating event brought together bright minds to debate emerging trends, ethical dilemmas, and challenges in the pharmaceutical industry.

Participants passionately argued both sides of pressing issues, showcasing their research skills, critical thinking, and persuasive communication. The competition provided an opportunity for students to enhance their public speaking abilities, develop logical reasoning, and gain deeper insights into the evolving landscape of pharmaceutical sciences.

A distinguished panel of judges, comprising faculty members and industry experts, evaluated the performances based on content quality, argument strength, clarity, and presentation skills. The winners were awarded prestigious certificates and accolades, recognizing their exceptional debating abilities and knowledge.



ACARI Pre Conference Workshop

The UMT School of Pharmacy successfully hosted the Pre-Conference Workshop for ACARI 2025 on December 17, 2024, at the Health Sciences Campus, UMT. This engaging session, titled “The Double-Edged Sword of Generative AI: Advancing Smart Research with Academic Integrity,” was led by Dr. Zaheer Ahmad, Project Director at the Directorate of Digital Learning & Skills Enhancement, University of Lahore (UOL).

The workshop provided a thought-provoking discussion on the opportunities and challenges posed by Generative AI in academic research. Dr. Zaheer highlighted the transformative potential of AI tools in enhancing research productivity while addressing ethical concerns, data integrity, and the risk of misinformation. Participants explored strategies for leveraging AI responsibly, ensuring compliance with academic integrity principles.

This session was part of the 2nd Asia-Middle East-Africa Conference on Academic & Research Integrity (ACARI 2025), reinforcing the commitment to resilience through integrity in academia and research. The workshop served as a platform for scholars, educators, and researchers to engage in meaningful discussions, fostering a culture of ethical research practices in the digital age.



Seminar on Women Healthcare

SPH recently hosted an insightful seminar on “Women’s Healthcare at All Ages”, featuring the distinguished speaker Zohra Khanum. The session focused on the importance of women’s health across different life stages, covering key topics such as preventive care, hormonal health, nutrition, and disease management. Prof. Zohra Khanum emphasized the significance of early health interventions, regular screenings, and lifestyle choices in ensuring long-term well-being. She also addressed common health challenges faced by women, providing practical solutions and empowering the audience with valuable knowledge. The seminar concluded with an engaging Q&A session, where attendees had the opportunity to discuss their concerns and gain expert advice. The event was well-received by students, faculty, and professionals, reflecting the School of Pharmacy’s commitment to raising awareness and promoting better healthcare practices.



Seminar on Clinical Pharmacist Journey

The UMT School of Pharmacy hosted an engaging session titled “The Clinical Pharmacist’s Journey: Challenges, Insights, and Future Directions”, delivered by Ghulam Mujtaba, a Board-Certified Pharmacotherapy Specialist (BCPS) at Shaukat Khanum Memorial Cancer Hospital & Research Centre (SKMCH&RC).

The session provided invaluable insights into the evolving role of clinical pharmacists in healthcare, highlighting challenges, career pathways, and advancements in pharmacotherapy. Mr. Mujtaba shared his expertise on critical care pharmacy, research leadership, and patient-centered pharmaceutical practices, offering students a practical perspective on the field’s future.

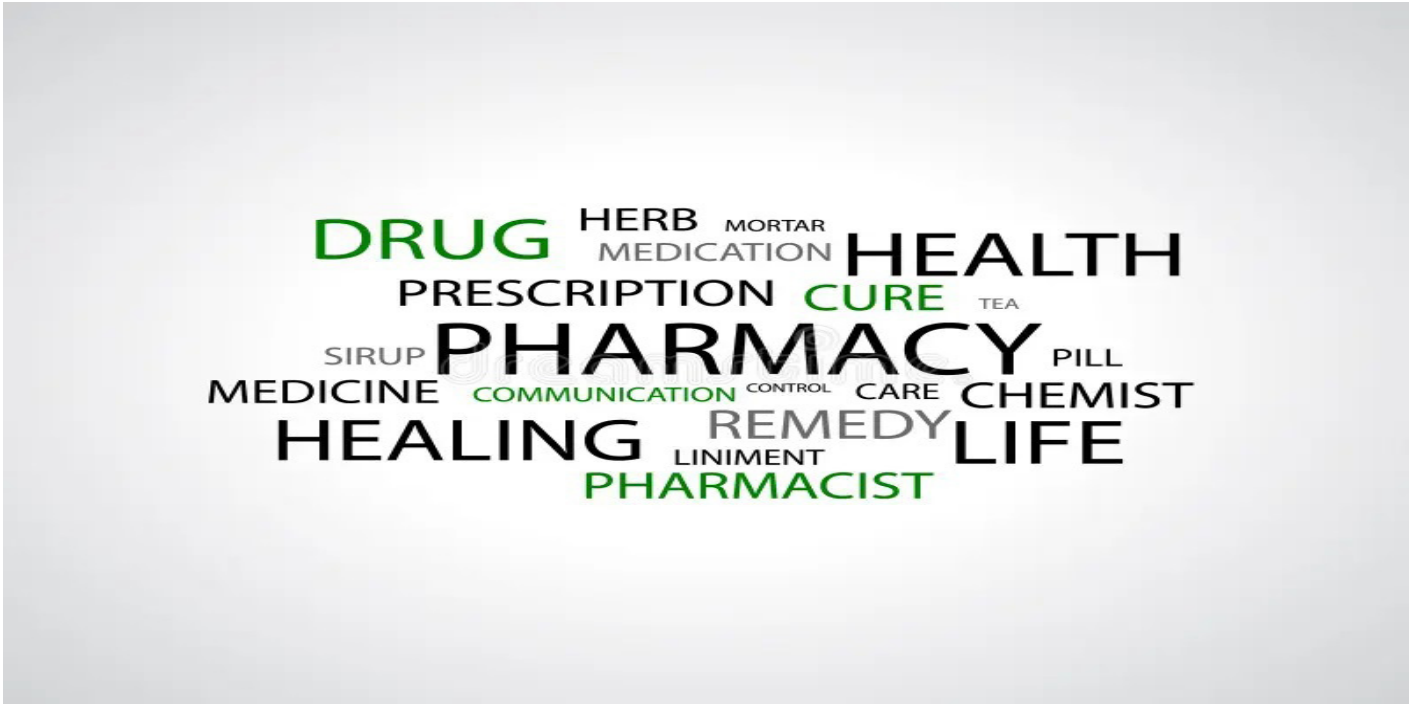
A sincere appreciation goes to Ms. Saba Ashraf for organizing this informative session, which inspired students to pursue excellence in clinical pharmacy and research. The event concluded with a token of appreciation presented to the guest speaker, acknowledging his valuable contribution to the academic and professional growth of aspiring pharmacists.

MOU signing Between IPS, UVAS and School of Pharmacy

The UMT School of Pharmacy proudly signed a Memorandum of Understanding (MOU) with the Institute of Pharmaceutical Sciences (IPS), UVAS, marking a significant step toward fostering innovation and excellence in pharmaceutical education and research. The ceremony was graced by Dr. Tahir Mehmood Khan, Director IPS, and esteemed members of IPS, who extended a warm welcome to the UMT delegation.

This strategic collaboration aims to enhance academic and research opportunities by facilitating joint research projects, faculty and student exchange programs, and collaborative training initiatives. By combining expertise and resources, both institutions aspire to create a dynamic learning environment that bridges academia with industry advancements.

This partnership reflects a shared commitment to advancing pharmaceutical sciences, healthcare research, and academic excellence, ultimately benefiting students, researchers, and the broader scientific community.



Continuous Professional Development

Recognition of Faculty for their Teaching Excellence

A big round of applause to our faculty members Ms Sonia Ashfaq and Ms Asra Shanzeh for receiving outstanding student evaluations and due recognition from UMT.

The UMT SPH - School of Pharmacy sincerely appreciates your commitment and dedication to delivering quality education and mentorship to students.



HCIC 2025 CONFERENCE REPORT



1st International Conference on Healthcare Challenges and Innovations in the 21st Century (HCIC 2025)

The 1st International Conference on Healthcare Challenges and Innovations in the 21st Century (HCIC 2025) was successfully organized by the School of Pharmacy, University of Management and Technology (UMT) in collaboration with Highnoon and other partners. This two-day conference highlighted by keynotes, panel discussions, workshops and poster competition brought together over 400 participants including academics, healthcare practitioners, industry leaders and other stakeholders to come together and share their insights into the future of healthcare. It aimed to foster dialogue and collaboration among key stakeholders, highlight groundbreaking innovations and the latest trends in pharmaceutical sciences as well as promote interdisciplinary collaboration to address complex healthcare issues effectively.

Objectives and Themes

The primary objective of HCIC 2025 was to foster dialogue and collaboration among key stakeholders in healthcare and pharmaceutical research.

The conference covered a broad range of topics, focusing on:

1. Innovative solutions for a changing healthcare landscape
2. Advancing interprofessional education and practice
3. Revolutionizing drug discovery and development
4. Ethical AI integration in healthcare
5. Genomics and personalized medicine



DAY 1 HIGHLIGHTS

The conference commenced with a formal inaugural session at Hakeem Saeed Hall, UMT. The session featured recitations, a national anthem, and welcome notes from Prof. Dr. Ejaz Cheema (Conference Chair & Founding Dean, SPH, UMT) and Dr. Asif Raza (Honorable Rector, UMT).

The chief guest, Dr. Adeel Abbas (CEO, Highnoon Laboratories) delivered speech emphasizing the significance of healthcare innovation.

The keynote speakers included Dr. Sohail Asif Qureshi (Director of Research, Shalamar Institute of Health Sciences), Dr. Rizwan Mehmood (Pharmaceutical Expert, UK), and Prof. Dr. Zohra Khanum (Principal, Services Institute of Medical Sciences), Prof. Susannah Hart (University of Cambridge) and Dr. Salim Razi (Canakkale Onsekiz Mart University, Türkiye).

A panel discussion on “Promoting Interprofessional Education and Practice” was moderated by Dr. Sarah Rehman, featuring renowned panelists (Dr. Omar Akhlaq Bhutta, Dr. Azhar Awan, Dr. Sajid Hameed, Dr. Salman Bashir, Dr. Ejaz Cheema) from various medical and pharmaceutical disciplines. The session provided insights into collaborative healthcare practices.

The poster exhibition and networking session facilitated discussions among young researchers and professionals. The day ended with an entertainment session, adding a cultural touch to the event.



DAY 2 HIGHLIGHTS

The second day began with a speech by Prof. Dr. Asghar Zaidi (Provost, UMT) and included insightful talks from speakers such as Dr. Zaheer Ahmad (Director, Digital Learning and Skills Enhancement), Dr. Rehan Gul (Head of Radiopharmacy, SKMCH), and Dr. Tahir Khan (Director, IPS, UVAS).

A key panel discussion on “Lifestyle Changes to Break the Link of Diabetes” was hosted by Highnoon Laboratories, featuring expert endocrinologists and cardiologist (Prof Dr Ali Asghar Jawa (Endocrinologist), Prof Dr Mujtaba Hassan (Endocrinologist), Prof. Dr Junaid Zafar (Cardiologist) who shared valuable insights on managing diabetes through lifestyle modifications. Another highlight of the second day were the workshops, covering topics such as AI in healthcare education, health insights using R-based machine learning, and molecular docking studies using Maestro Schrodinger. These workshops conducted by Dr. Majid Ali, Dr Mahmoud Mohamed, Dr. Waqar Aman provided hands-on learning experiences for participants. The closing session included oral presentations and an award distribution ceremony recognizing outstanding contributions to research and innovation. Followed by Prof. Dr. Abid Sherwani’s final address on HCIC. The conference ended with a group photo session, symbolizing the collaborative spirit of HCIC 2025.



Student Corner

Javaria Rasheed

The journey of a thousand miles begins with a single step. When I first arrived in the USA as part of the UGRAD exchange program, I never imagined that as a girl alone in this big country, I would conquer so many incredible experiences. This journey truly feels like a dream come true. The foundation of my success lies in my experiences at UMT, which played a significant role in shaping my confidence. The syllabus in biopharmaceutics and pharmacokinetics at SPH is remarkably similar to the international curriculum



here, which helped me adjust and boosted my confidence. Being a Title IX Student Ambassador and an active member of several student organizations has allowed me to grow as a leader. Exploring different states has broadened my perspective, and I document my journey on Instagram (@jv_theexplorer), hoping to inspire others.

To all future aspirants: take that first step and embrace every opportunity, and you'll find yourself accomplishing things you once thought were beyond your reach.

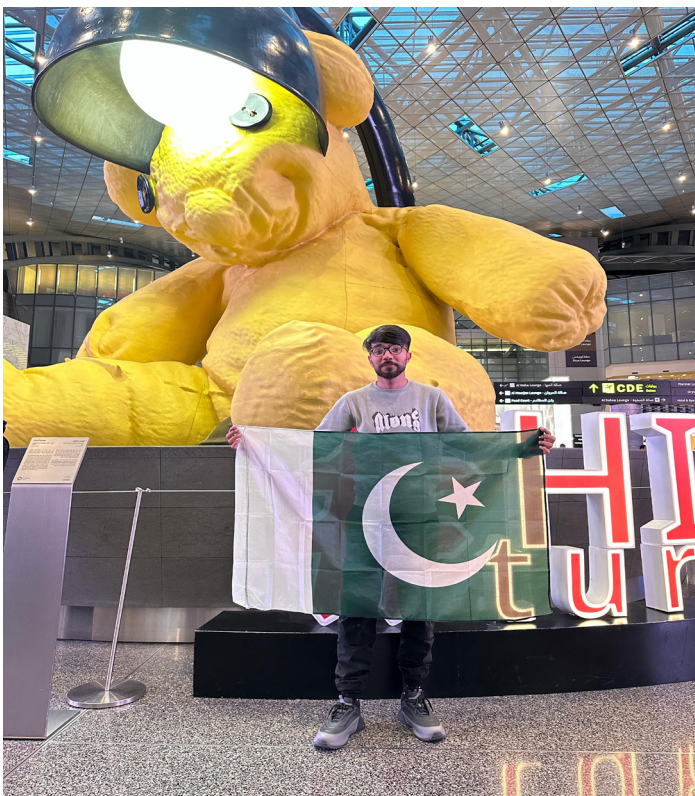


Maaz Imran

As a spring 2025 candidate for the Global UGRAD Program, my time in USA has been a transformative journey, immersed in the sights, sounds, and cultures of the USA. I owe much of my preparedness to my time at UMT (SPH). The university shaped my curricular and extra-curricular skills, through student organizations, and creative projects. The diversity of students from around the world enriched my experience, as I formed meaningful friendships with peers from America Japan, Uzbekistan, Malaysia, China Bangladesh, and Taiwan, exchanging cultural insights and celebrating our differences. I participated in events like international food fairs and music nights, which highlighted the vibrant fusion of traditions on campus. Despite the challenges of adjusting to a new academic system and balancing studies



with social engagement, these obstacles became opportunities for growth, teaching me adaptability and patience. Through these experiences, I have gained a deeper appreciation for cultural diversity, which has broadened my perspective and inspired me to advocate for greater cross-cultural understanding in my personal and professional life. My time at UMT played a crucial role in shaping this journey, which prepared me to step confidently into this new chapter of learning and cultural exchange. As I continue to navigate the complexities of cultural diversity, I invite you to join me on this journey. Stay tuned for more reflections and updates on my Instagram @maazjournals



Research Corner

Identification of rare missense variants in the BSN gene co-segregating with chronic otitis media in a consanguineous Pakistani family

Yousaf A, Yousaf S, Shabbir AS, Yousaf R, Riazuddin S, Shaikh RS, Santos-Cortez RLP, Ahmed ZM. Identification of rare missense variants in the BSN gene co-segregating with chronic otitis media in a consanguineous Pakistani family. *Mol Genet Genomic Med.* 2024 Sep;12(9):e2478. doi: 10.1002/mgg3.2478. PMID: 39302268; PMCID: PMC11414307.

Abstract

Background: Otitis media (OM) is the most frequent and complex middle ear condition with multifactorial etiology including genetic predisposition. OM depicts a variable clinical spectrum, leading to speech, developmental delay, and hearing loss. Here, we report the clinical and genetic findings of chronic suppurative otitis media (CSOM) segregating in a six-generation consanguineous Pakistani family PKOM08.

Methods: Clinical evaluations, including audio and tympanometry, were conducted to assess OM manifestation and their impact on hearing function. Exome sequencing was performed to identify potential genetic variants underlying CSOM in the study participants.

Results: Clinical evaluation of participating individuals revealed varying degrees of disease severity, with mild to moderate hearing loss. All the affected individuals had CSOM with no other apparent comorbidity. Whole exome followed by Sanger sequencing revealed two rare heterozygous variants [c.1867C>T, p.(Pro623Ser) and c.11015G>A, p.(Arg3672Gln)] of BSN gene in most of the affected individuals of family PKOM08. BSN encodes a scaffold bassoon protein involved in synaptic vesicle trafficking. The identified variants replaced evolutionary conserved amino acid residues in the encoded protein and are predicted to impact the ionic interactions in the secondary structure.

Conclusion: A deep intronic variant of BSN has been previously implicated in the etiology of childhood ear infections. Our study further supports a link between BSN-impaired function and ear infection and CSOM in children.



Impact of artificial intelligence on the academic performance and test anxiety of pharmacy students in objective structured clinical examination: a randomized controlled trial

Majid Ali, Sarah Rehman & Ejaz Cheema

Research Article

Published: 04 February 2025
(2025)

Abstract

Background The rapid advancement of generative artificial intelligence (AI) in recent years has led to its increased application across various fields including education. One area where AI can significantly impact is clinical education, particularly in the preparation and execution of objective structured clinical examinations (OSCEs). **Aim** This study aimed to evaluate the impact of AI-generated study material and feedback on the academic performance and level of anxiety of pharmacy students in formative OSCE. **Method** This was a 4-week (June–July 2024) randomized controlled study. Students of 6th semester PharmD program were randomized into either an intervention or control group. The intervention group received intervention which comprised a comprehensive training session on how to use AI tools (ChatGPT, Gemini and Perplexity) for generating study materials with personalized feedback, in addition to usual OSCE instructions. The control group only received the usual OSCE instructions. In addition, all students completed the test anxiety inventory (TAI) questionnaire before the OSCE. **Results** Eighty-eight (40 male, 48 female) out of 92 (96%) students attended the OSCE and completed the TAI questionnaire. Each group had 44 (50%) students. The mean OSCE mark was 13.26 (± 5.05) out of 30. No significant difference was found between the intervention [12.98 (± 5.15)] and control [13.54 (± 5.00)] groups regarding mean OSCE marks ($p=0.550$). Similarly, no significant difference was found between the groups regarding the total TAI score ($p=0.917$). **Conclusion** While the use of AI tools did not improve the academic performance of students or reduce test-related anxiety, they did not negatively impact these outcomes either. Future research should investigate the long-term effects of AI-based interventions on educational outcomes.

Keywords Academic performance · Artificial intelligence · OSCE · Randomized controlled trial · Test anxiety



Health Corner

Boosting your Immunity through Supplements to combat Seasonal Allergies & Infections



By Dr Rabia Altaf
Associate Professor, SPH

Health is wealth. Positive thoughts, active mind and enthusiastic soul are a great combination to pass a healthy life. However, seasonal allergies and infections do knock your door. Keeping subject to your exercise, a regular part of your daily life, still your immunity is at stake if you don't follow food and supplements intake according to the winds of the time.

The immune system of the body is a security alert system that defends us from pathogens causing diseases. The response of the body comprises of innate and adaptive response. The innate response manifested through the physical barriers as skin and gut epithelium while the adaptive responses are the slow generated but memory-based responses which protect the body from further exposures. The outcome of immune response may be redness, swelling, inflammation, heat, pain etc. The immune functions of the body are maintained by consuming adequate number of natural vitamins as vitamin C, D, E and minerals as selenium and zinc. Deficiency of these vitamins and minerals may have a hazardous effect on the health and immune system of the body.

Although the daily dietary intake for every person may vary based on their individual physiology but in general, almost 8 milligrams of zinc in women and 11 milligram in men per day are recommended as a healthy intake. Since it is not naturally present in the body so it must be taken in from certain foods including red meat like beef, poultry like chicken and turkey, seafood especially oysters, nuts including cashew and almonds, dairy products etc. Zinc deficiency adversely affects immune function by impairing the formation, activation, and maturation of lymphocytes.

Selenium is another essential mineral present in certain foods as seafood, meat, poultry, eggs, and dairy products as well as bread, cereals, and other grain products. Its daily intake may range from 50-70mcg for healthy adults. Selenium helps support both the innate and adaptive immune systems through its role in T-cell maturation and function and in natural killer cell activity. It may also reduce the risk of infections.

As a component of enzymes that have antioxidant activities, selenium might help reduce the systemic inflammatory response that can lead to ARDS and organ failure.

Some other supplements may include Quercetin, turmeric (natural root vegetable), vitamin C (ascorbic acid), honey, stinging nettle (antiallergic plant), spirulina (algae supplement) and bromelain (natural enzyme of pineapple). An adequate amount of all these natural supplements may help to boost our immunity to combat the effects of seasonal allergies and infections that may otherwise leave a lasting impact on our daily routines and health.

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Corrigendum to "Zinc supplement reduces allergic responses through modulating the p38 MAPK pathway activation in an allergic rhinitis mouse model" [*J. Trace Elem. Med. Biol.* 75 (2023) 127094]

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List size is important. But truly what matters is how many people are reading your newsletter every day and how they're engaging with it.