

Edition 2

# RESEARCH INSIGHTS

• BRIDGING HEALTHCARE AND RESEARCH •

## EDITORIAL

It is a pleasure to welcome you to the second issue of Research Insights, IHHN's bi-annual research newsletter. This platform continues to reflect our growing dedication to research, as a vital part of our mission to improve healthcare outcomes through evidence-based practices. This issue captures research activities from July 2024 – December 2024.

Over the past six months we have maintained our momentum, laying the groundwork for long-term goals outlined in the "Research Strategic Plan". While the journey is still in its early phases, the collective enthusiasm and engagement across departments indicate a promising path forward.

We remain guided and inspired by the leadership of Dr. Abdul Bari Khan, Dr. Syed Zafar Zaidi, and Dr. Sohail Rao. I extend my sincere thanks to the members of the SRC Communication and Publication Sub-Committee, and all contributors to this issue.



**Prof. Faridah Amir Ali**

Director Academics, Principal ICFMPH Chair, Communication and Publication sub-committee, Scientific Research Committee, IHHN, IUHS, Karachi, Pakistan

## IHHN ON THE GLOBAL STAGE

### GLOBAL VOICES, EXCHANGING KNOWLEDGE



IHHN participated in St. Jude Children's Research Hospital's Global Alliance Annual convening in December 2024 in Memphis, USA. Representing IHHN were Dr. Javeria Aijaz, Section Head & Consultant, Molecular Biology; Dr. Arif Ali, Senior Manager, Pharmacy Services; Dr. Ahmer Hamid Consultant, Pediatric Oncology; and Ms. Afifa Batool, Deputy General Manager, Marketing & Communications.

**Dr. Javeria Aijaz**, representing the diagnosis category presented IHHN's contributions in Pakistan, showcasing innovative and collaborative work with St. Jude DIVIA initiative (Diagnostic Innovations for Value-based Implementation Models to Improve Access) at the opening plenary session. Further, she co-hosted a breakout session on Advancing Specialized Cancer Diagnostics alongside the St. Jude DIVIA team addressing cost landscapes, resource challenges, scalability, and supply chain issues in low and middle-income countries. She also participated in NGS Collaborative Workgroup where she detailed IHHN's implementation of transcriptome sequencing for pediatric cancer using Oxford Nanopore Technologies, in collaboration with St. Jude and the University of North Carolina.

**Dr. Arif Ali**, presented IHHN's work on establishing standardized pediatric oncology pharmacy services across five shared-care public hospitals, emphasizing patient safety and hazardous drug handling via a poster presentation.

**Ms. Afifa Batool**, co-led an interactive session on Standing Strong for Childhood Cancer Care with Dr. Soad Fuentes-Alabi (El Salvador) and Ms. Rana Ghafary (Jordan), which explored innovative solutions for ensuring continuity of pediatric cancer care during crises.

## SCIENTIFIC PRESENTATIONS AND CONFERENCES



**Dr. Saima Ali**, Head of Emergency Medicine, IHHN, presented a paper "From Singularity to Plurality-Experience of Emergency Medicine Residents as Educators in a Multicultural Teaching Encounter at a Low Resource Tertiary Care Health Network in Pakistan" at the 8th International Conference on Health Professions Education, organized by University of Lahore, Pakistan.

**Dr. Rukhsana Babar**, Senior Consultant, Gynaecology, IHHN, presented an abstract on the "Role of Preoperative Bath in Prevention of Surgical-site Infection" in the Society of Obstetricians and Gynecologists of Pakistan Conference, Islamabad.



**Dr. Shanila Memon**, Senior Registrar, Department of Pediatrics, IHHN, presented an e-poster on "Integrated Care Framework - A Cost-effective Public Health Intervention for Holistic Management of At-risk Mothers & Infants Under Six-months" at the Innovations in Pediatric Care, Bridging Research and Practice, held at Aga Khan University, Karachi.

**Dr. Samreen Sarfaraz**, Chair, Infection Control Services and Consultant, Infectious Diseases Department, IHHN, attended as a distinguished speaker at the Medical Microbiology & Infectious Diseases Society of Pakistan's inaugural Regional Research Meeting, held at Jinnah Sindh Medical University, Karachi. She presented IHHN's research on the "Use of Combination Therapy Involving Ceftazidime, Avibactam & Aztreonam as a Salvage Treatment for Carbapenem-resistant Gram-negative Organisms."



**Dr. Saba Shahid**, Chair, Pediatric Services and Consultant, Pediatric Medicine, IHHN, presented a poster titled "Complementary Feeding in Children – Recommendations for Correct Practices" at the Annual Pakistan Islamic Medical Association Conference in Karachi.

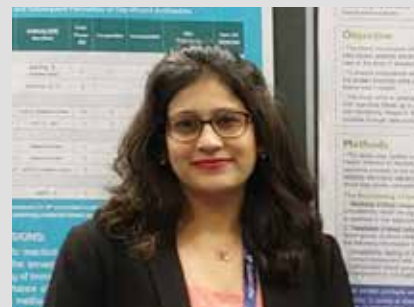
**Dr. Shafaq Sultana**, Head of Department of Health Professions Education, IUHS, presented a policy paper titled "Integration of School Health Curriculum in Allied Health Science Programs: A Step Towards Social Accountability" at the Ubuntu 2024 Conference in South Africa. The paper, co-authored by Drs. Madiha Ata, Ghina Shamsi, and Faridah Amir Ali, was developed during their participation in a social accountability fellowship and was subsequently published in a special edition of the Social Innovations Journal.





**Dr. Saima Saeed**, Consultant Pulmonologist and Director of the Lung Health Program, IHHN, and **Dr. Madiha Siddiqui**, Clinical Manager, Lung Health Program, attended the Bloomberg Tobacco Control Meeting in Turkey. They presented a poster on "Voices Against Tobacco," showcasing its impact on youth advocacy and policy reform, along with survey findings from Sindh and Punjab on tobacco use, spending, and public policy perceptions.

**Dr. Shabneez Hussain**, Head of Blood Transfusion Services, IHHN, presented a poster titled "Electronic Monitoring and Real-Time Corrective Actions for Optimizing Transfusion Practices at an AABB-Accredited Hospital in a Low-Income Country," at the Annual Meeting of the Association for the Advancement of Blood and Biotherapies in Houston, USA. The research highlighted the use of Bedside Electronic Transfusion Monitoring Application in preventing mis-transfusions and errors in component administration, while also identifying and addressing delays in the transfusion process through regular data audits.



## WORKSHOPS



**Dr. Mahnoor Zafar**, Clinical Research Associate, IHHN; **Dr. Muhammad Anas Khan**, Epidemiologist, IHHN; **Dr. Abdur Rehman**, Medical Officer, IHHN; **Ms. Nida Ghouri**, Manager-Analysis and Research Training Unit, ORIC-IHHN, attended a CME workshop on Mathematical Modeling for Vector-borne Diseases at Aga Khan University, Karachi. Led by U.S. experts, the workshop combined theoretical learning with practical coding exercises using R software. Their participation enhanced their skills in data-driven decision-making, which they are now applying to ongoing Infectious Disease Projects at IHHN.

## HONORING EXCELLENCE

### MAJOR GRANTS FUELING IHHN'S VISION

#### Characterization Of Diverse Pediatric Cancers in low and middle-income countries using Low-Cost Nanopore Sequencing

The IHHN Molecular Biology Department's project aims to utilize Oxford Nanopore Technologies' low-cost-effective sequencing platform to establish classification models for pediatric solid tumors, lymphomas, and CNS tumors.

The project will optimize methodologies for challenging specimens, harden protocols for low and middle-income countries, and integrate analytics into portable hardware, developing a sustainable, adaptable diagnostic solution for childhood cancer classification using globally accessible technology.



**Dr. Javeria Aijaz**



**Dr. M. Rafie Raza**

**Dr. Javeria Aijaz**, Section Head & Consultant Molecular Biology, IHHN, is the principal lead, along with co-investigators, **Dr. Muhammad Rafie Raza**, Consultant Pediatric Oncology, IHHN, and **Dr. Fozia Lateef** Section Head & Consultant, Clinical Laboratory Services, IHHN.



**Ms. Nida Jawaid**, Senior Biorepository Officer, IHHN, represented IHHN at the Pakistan Association of Pathologists Conference 2024. Selected for a Bursary Award by Medical Microbiology & Infectious Diseases Presentation Award for the presentation of original research "From Revival to Genetic Analysis: Streamlining the Process for Mycobacterium TB Isolates in Biorepositories."



**Ms. Surhan Badar**, Administrator ORIC-Institutional Review Board, IHHN, showcased leadership in health ethics and disability rights at the 2024 Global South Women's Forum in Colombo. As one of two fully funded Pakistani delegates, she advocated for inclusive healthcare under the theme "Dreams of Disability Joy and Justice."



**Ms. Surhan Badar**, Administrator ORIC-Institutional Review Board, IHHN, represented the institution at the Global Forum on Bioethics in Research: Ethical Issues in Health & Climate Change Research, in Malaysia, November 2024. Supported by WHO and NIH, she highlighted IHHN's community-based research and stressed the importance of ethical practices with vulnerable populations.



**Dr. Nazia Khursheed**, Chair, Clinical Laboratory Services and Consultant, Microbiology; **Dr. Javeria Aijaz**, Section Head & Consultant, Molecular Biology; **Dr. Neelum** Consultant Hematology; **Dr. Zaira Rehman**, Senior Computational Biologist; from IHHN, participated in an Advanced Gene Sequencing training at the Research Center Borstel in Germany. This marks a key milestone in IHHN's partnership with Borstel, now expanded into a formal research collaboration on Whole Genome Sequencing of Mycobacterium TB Isolates.



**Dr. Zaira Rehman**, Senior Computational Biologist, IHHN, received the prestigious COMSTech Fellowship for Advanced Training in Virology and Vaccine Technologies. Selected from 57 Islamic countries, she trained at Bio Farma, Indonesia, in July 2024, gaining expertise in vaccine development, quality control, halal certification, and diverse vaccine platforms.



**Dr. Amir Kazi**, Consultant Infectious Diseases, IHHN, served as the Chair of the Organizing and Scientific Committee for the Medical Microbiology & Infectious Diseases Society of Pakistan's inaugural Regional Research Meeting (Sindh), held in November 2024, at Jinnah Sindh Medical University, Karachi.

DISTINGUISHED PUBLICATIONS

HIGH IMPACT PUBLICATIONS

July 1, 2024 – December 31, 2024

Manuscripts

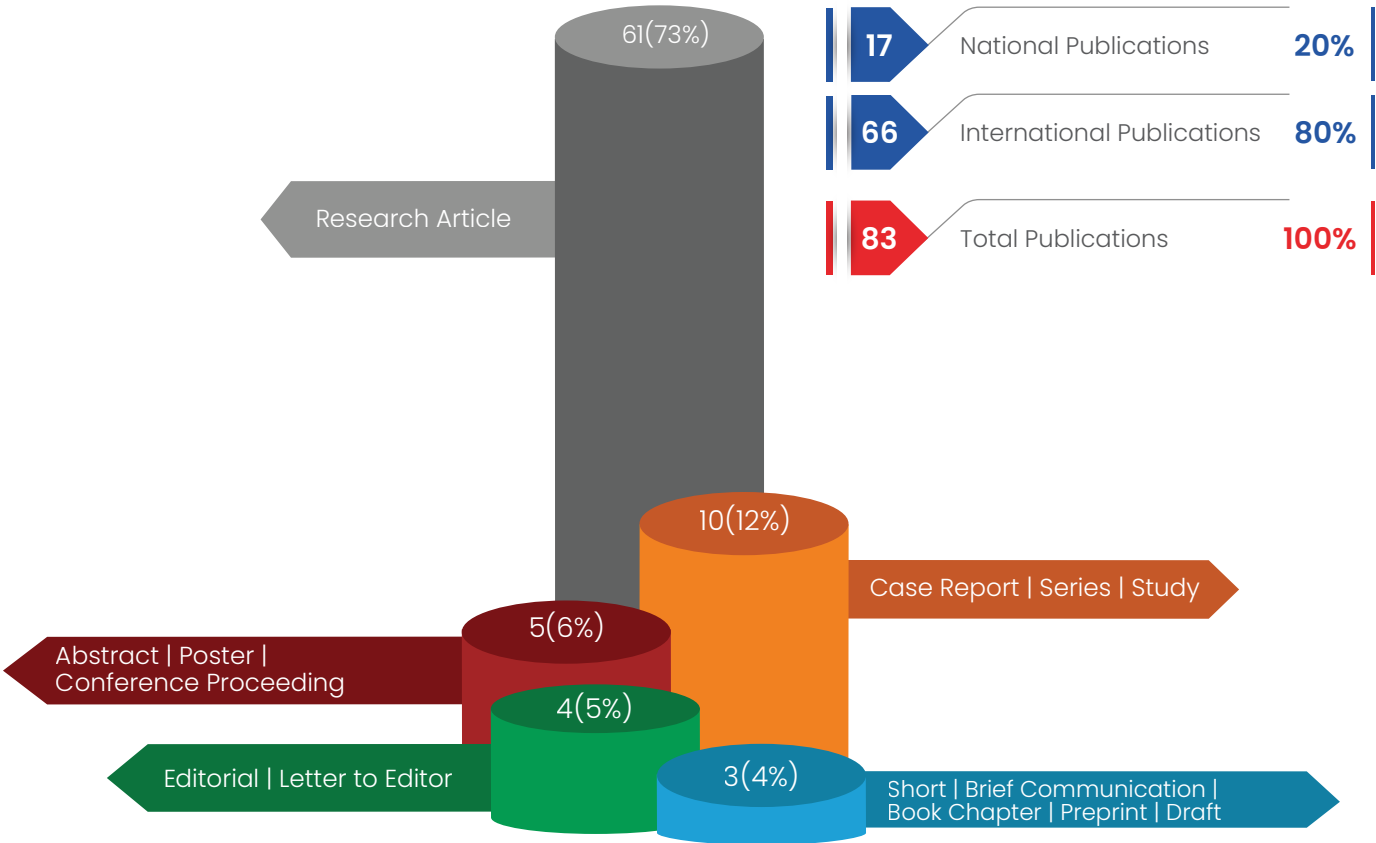
- Riaz, Quratulain, et al. "Characteristics of relapsed and refractory pediatric Hodgkin lymphoma; a 10-year retrospective study of an LMIC." ecancermedicalscience 18 (2024): 1729.
- Adnan, Fareeha, et al. "Safeguarding Accuracy: The Impact of Interventions on Reducing Blood Culture Contamination." Clinical Pathology 17 (2024): 2632010X241265857.
- Bushra, Quratulain, et al. "Epidemiological trends of febrile infants presenting to the Paediatric Emergency department, in a tertiary care hospital, Karachi, Pakistan: a retrospective review." BMJ open 14.8 (2024): e076611.
- Kazi, Abdul Nafey, et al. "A vector borne, airborne and food borne infection with secondary hemophagocytic lymphohistocytosis: Case of triple infections in an immuno-competent patient." Indian Journal of Medical Microbiology 52 (2024): 100752.

Abstracts

- Jabeen, Sumerah, Nimra Siddiqui, and Saba Akhtar. "Abstract# 1913275 A Case Series of Rare Mayer-Rokitansky-Kuster-Hauser Syndrome Variants: Navigating the Uncharted Waters." Endocrine Practice 30.12 (2024): S35.
- Meraj, Fatima, and Hamza Khan. "AML-116 MIXED-PHENOTYPE ACUTE LEUKEMIA; T/MEGAKARYOBLASTIC: DOES IT REALLY EXIST?" Clinical Lymphoma Myeloma and Leukemia 24 (2024): S295-S296.

PUBLICATIONS

July 1, 2024 – December 31, 2024



## TRAILBLAZING INITIATIVES

### EHR-CON 2025

**Electronic Health Record in Pakistan: The Way Forward**

September 12-13, 2025 at IHHN Jubilee Town Campus, Lahore



Pakistan's first ever conference that is aimed at showcasing the cutting-edge electronic health record systems and technologies in advancing digital healthcare transformation. The conference will gather EHR stakeholders (Government, Healthcare Professionals, Tech-experts, Medical & IT students) to explore opportunities to adopt & implement the Electronic Health Records in healthcare services in Pakistan.

### ICON 2026 | 8TH BIENNIAL CONFERENCE

**Resilient Care, Sustainable Futures: Bridging Climate Action and Patient-Centered Healthcare**

April 10-18, 2026 at IHHN Korangi Campus, Karachi; IHHN Jubilee Town Campus, Lahore; and Recep Tayyip Erdogan Hospital, Muzaffargarh



The 8th Biennial Conference - ICON 2026 is scheduled to take place across the Indus Hospital & Health Network IHHN in April 2026. ICON 2026 aims to reimagine healthcare by focusing on sustainability and patient centered care, reflecting IHHN's commitment to fostering a resilient and sustainable healthcare ecosystem.



#### Research Insights Team, IHHN

*Chief Editor:* Dr. Sama Mukhtar,

*Content & Editorial Team:* Prof. Faridah Amir Ali, Dr. Muhammad Fareeduddin, Dr. Zehra Kazmi, Sayyeda Reza, Dr. Madiha Ata, Afifa Batool

*Designed by:* Ali Murtaza