



PAEDIATRIC PAGES

Vol 5 Issue 1: | Newsletter from the Department of Paediatrics & Child Health

Dear Colleagues,

Reflecting on my recent visit to Johannesburg and feeling incredibly motivated by figures such as Nelson Mandela and Bishop Desmond Tutu, both emphasized the importance of service, equality, and the potential of everyone to make a difference. In the context of Paediatrics, their vision can be seen as a call to ensure every child has the opportunity for a healthy start in life, supported by committed healthcare professionals and innovative research. With that, I'm excited to bring you some wonderful updates as we continue to strive and nurture the practice of paediatrics through equity, compassion, and community impact.

First off, I'm excited to announce the addition of new faculty members who will be crucial in enhancing our clinical services, ensuring comprehensive care for our young patients and their families. Their expertise and dedication are set to significantly reinforce our department's pursuit of excellence in paediatric healthcare.

During the recent annual awards night and Medical College Convocation, several of our esteemed faculty members received accolades for their commitment to clinical teaching, innovative academic collaborations, and research. These honours not only inspire us but also reinforce our department's mission of ongoing excellence.

Moreover, I am thrilled to observe the sustained expansion of our research initiatives in the department. Our researchers are leading the way in groundbreaking discoveries and partnerships, advancing our knowledge of childhood diseases. However, they also face significant challenges, particularly in navigating complex regulatory environments, which the Vice Chair, Research and I, are committed to addressing to support their vital work and the progress of the organization.

I close with a quote by Mandela, "Do your little bit of good where you are; it's those little bits of good put together that overwhelm the world." Do not be discouraged by the letter on your appraisal. Cherish every small success and look forward with the knowledge that each one of you significantly affects children's and families' lives. Together, we will keep pushing the limits and aiming for the highest standards in all we undertake.

Best regards
Fyezah Jehan
Chair

Service & Quality Initiatives



New clinics at WCH

General Paediatrics



Dr Syed Muhammad Umair Hamid



Dr Shahzaib M. Khan

Paediatric Surgery & Urology



Dr Zafar Nazir

Occupational Therapy



Maria Khan



Abdul Samad

Speech Therapy



Areeba Ahmed

Upcoming: A Paediatric Orthopaedic Surgeon will do clinics at WCH 1st floor.

Peritoneal dialysis has started at Paediatrics with formal round charges defined in the financial system for the Nephrologists. Now the PICU and NICU teams work with Paediatric Nephrologists.



2 new Transcutaneous Bilirubin monitoring machines

The non-invasive and painless TcB to test jaundice levels is now accessible across all neonatal areas. The two meters were arranged through bridge financing from Research with special thanks to Dr. Fyezah's research grant. The clinical services team identified and procured the cost-effective Bilicare brand, which is half the price of Drager.



Paediatrics has acquired a **new Cadwell 32 Channel EEG machine** to fast track appointments. The machine has been installed at

Neurophysiology Services at PZP ground floor Eo. We thank **Dr. Prem Chand** for securing donor funding (\$30,000) to make it happen.

Our Paediatric **Haemodialysis** service is now being offered in- and out-patient exclusively by the paediatric nephrology section. With **Dr Vina Tresa's** addition we now cater to every paediatric age group for acute renal failure and end-stage kidney disease. A recent success case was of a girl who was dialyzed for eight months till she could get her transplant at SIUT.

The **CDRC's** Occupational Therapists have re-started group therapy for children's socialization skills and proficiency in activities of daily living. The centre now also has an inventory of advanced tools and toys for better engagement, learning and interactivity with the children during their therapies and sessions.

First Bone Marrow Transplant in PICU

A 6-month-old baby boy was transferred from the Bone Marrow Transplant (BMT) unit to the PICU with a diagnosis of the rare and serious ADA-SCID (Severe Combined Immune Deficiency). The baby was experiencing distress and required HIFLOW support. His condition deteriorated, necessitating intubation. He became critically ill, requiring Peritoneal Dialysis initially and later Continuous Renal Replacement Therapy. Notably, this marked the first instance of stem cell transfusion in the PICU. The team comprised a bedside RN, a PICU Shift Team Leader, a PICU Resident, a PICU Fellow, and one RN from the BMT Unit. But we are happy to report a positive result supported by the meticulous care provided by the Nursing team.

Our new Infant Immobilizer **MED-VAC device** is drastically reducing the need for intubation during MRIs for babies, reducing costs for parents, anxiety, invasive ventilation, sedation, anesthesia.

The PICU team has started a nursing program to involve families with **Early Patient Mobilization**, which is crucial to prevent complications associated with prolonged immobilization in ventilated patients (muscle weakness, respiratory issues). It is working wonders with communication, lowering anxiety and improving parent confidence.

The NICU nursing team has introduced the **SpeCtra breastfeeding pump** for mothers with sick neonates.

Academia & Training



Dr Shabina Ariff organized two days of training on **Newborn Critical Care** for paediatricians from across Pakistan. The workshop covered protocols and techniques but also included recommendations on prebiotics, emollients, nutrition, and best practices for preterm babies.

Dr. Shabina Ariff was invited as an Expert in the Provincial Consultation on the **Kangaroo Mother Care (KMC) Implementation Strategy and the Revision of the National KMC Guideline and Training Module** in Karachi. The organization of this gathering was a collaborative effort between the Nutrition Wing of the Ministry of National Health Services, Regulations, and Coordination, Nutrition International, the Government of Sindh, and the WHO. She also conducted an educational session on **Global Trends of Neonatal and Infant Mortality** at Cedar College in Karachi.



Dr Fatima Mir gave a talk on **Infectious Disease** at Kidney Centre.



Dr Arshalooz Rahman and **Dr Vina Tresa** led a session on early recognition and management of **Acute Kidney Injury** to educate doctors on indication and skills to perform acute peritoneal dialysis at Sindh Institute of Child Health and Neonatology.

Prof. Dr Khadija Humayun, Dr Muzna Arif, Dr FoZIA Memon, and Dr Maryam Haider conducted a workshop on navigating Type 1 diabetes in children and adolescents at Dow University to train Paediatric and general physicians in Type 1 Diabetes and DKA. They also did a workshop on management of Type 1 Diabetes in Children and Adolescents at Abbasi Shaheed Hospital as part of the MBBS Class of 1988 workshop grants.

Dr Imran Nisar delivered a presentation on Childhood Immunization, drawing from national and provincial surveys, and the HPV Vaccine at the Annual Scientific Conference hosted by Fatima Jinnah Medical University.

A capacity-building workshop for medical officers on Integrated Management of **Neonatal and Childhood Illness**, interpersonal skills, and behavioral communication was organized at AKU with **Dr Shabina Ariff** addressing paediatric and neonatology cases relevant to primary healthcare, focusing on remote dispensaries in Punjab. **Dr Kamran Sadiq** discussed challenges in paediatric gastrointestinal healthcare.

Dr Aamir Abbas delivered a session on Integrating **ChatGPT** into health research, plug-in ecosystems with ChatGPT for research and analytical applications, the pitfalls of AI-generated content, and the potential of large language models.

The AKU PCCM team of **Dr Naveed ur Rehman, Dr Qalab Abbas, Sidra Khan, Washdev Ram, and Uroosa Saman** and the SICHN PCCM team held a workshop on the "Kids Sepsis Toolbox" to improve recognition and management of paediatric sepsis and septic shock.



Newborn Screening is recommended for all babies shortly after birth for timely identification to prevent neurodevelopmental impact. AKU Karimabad organized a session for paediatric medical officers and nurses to encourage parental acceptance. **Prof Khadija Humayun** talked about the importance of screening for Congenital Adrenal Hyperplasia and **Dr Muzna Arif** spoke on screening for Congenital Hypothyroidism.



There has been a recognized lack of confidence among healthcare workers in conducting resuscitation in **Paediatric Code Blue** events in between certifications. **Dr Naveed ur Rehman** is leading **Transform Code Blue** which regularly refreshes paediatric resuscitation and code blue skills for nurses, residents, and healthcare workers.

Balochistan's first paediatric subspecialty conference

The shortage of Paediatric Neurologists in Balochistan is so bad—that AKU-trained Karachi-based ones fly to Quetta regularly to long wait lists. This is why **Prof. Shahnaz Ibrahim**, as president of the [Child Neurology Society of Pakistan](#), and Dr Prem Chand were part of the team that organised the first paediatric subspecialty conference in Balochistan to encourage paediatricians to apply to AKU's 3 two-year fellowship positions.

In *SOS Children's Village Jamshoro*, an annual *Jashn-e-Bahara* fundraiser is held for the children. This year, **Dr Heeramani Lohana** and her team organized a Nutrition camp to identify cases of anemia and malnutrition among the children.



Trainees **Shan Boota** and **Syeda Kisa Fatima Naqvi** presented a poster on left ventricular longitudinal strain as part of a functional echocardiographic study in patients receiving chemotherapy during the closing ceremony of the Allied Health Trainee Skill Development Program.



Dr Fyezah Jehan and **Dr Sana Syed** from UVA led a seminar on Women's Leadership Development in Academic Medicine.

The first "**Practical Guide to Medical Genetics Symposium**" event, organized by AKU, the Pakistan Society of Medical Genetics, the Sindh Institute of Child Health and Neonatology, and Nur International University, brought together over 85 clinicians, students, genetic counselors, and laboratory staff, aiming to integrate medical

genetics and genomics into daily medical practice. With three oral presentations and 14 submitted abstracts, the importance of genetics in healthcare and its relevance for practitioners and the broader medical community were discussed.

The PICU held its first-ever **Child Abduction Drill** to practice swift responses such as alerting authorities and implementing security protocols.

Occupational Therapist **Ms. Aisha Khan** attended a workshop on "Evaluation and Intervention of Sensory Processing in Paediatrics Rehabilitation" from Faizan Rehabilitation Centre, facilitated by Ms. Nighat Tahir, Consultant Occupational therapists and Certified Sensory Integration – CLASI. Aisha learned somatosensory techniques covering tactile, vestibular, and proprioceptive senses, which will help her enhance child's coordination, motor planning, judgment skills, spatial relationship and help overcome their anxiety of motion sickness.

Interacting with the research

Nurses reading x-rays better

The PIUC/PCICU CUSP monthly meeting identified the need for nurse education on patient x-rays. As a result, a quality project was started with an interventional study with pretest, intervention, and post-test phases. Only 4 out of 35 RNs passed the quiz. Interventions included expert-led sessions, discussing x-rays during rounds, and integrating x-ray findings into nurse handovers. The posttest showed improvement, with 32 nurses scoring 90% and above. The project's success was highlighted at the 5th Annual Research Day and is shortlisted for the World Federation of Pediatric Intensive & Critical Care Societies conference in Mexico in June 2024.

Is a second dose of Typhoid vaccine needed?

At the last global meeting of the largest consortium against Typhoid, in Rwanda, **Prof Farah Qamar** and her team presented data on the response to the new **Typhoid vaccine** launched in Pakistan in 2020. In 2017-18, AKU responded to a Typhoid outbreak in Hyderabad with the new vaccine. They followed the children for over four years, collecting serial blood samples. The data shows that a single dose protects children up to 4 years. Crude analysis shows there was a 50% reduction in cases. The immune response wanes quickly in younger children, however. This is where policy decisions will be made: is a second dose needed? Right now one is given at 9 months. Perhaps the vaccination schedule should be moved to 15 months. Global experts and vaccine funders will deliberate on this now.



Prof. Farah Qamar spoke at the 57th US Japan Cooperative Medical Science Program Joint Panel Conference and Cholera and other Bacterial Enteric Infections in Okinawa, Japan. Data for Shigella surveillance generated over the last two years was presented. The data on high antimicrobial resistance will impact treatment guidelines for children with dysentery and watery diarrhea. She also attended the 2nd Enterics for Global Health meeting in Istanbul and was a speaker at the inaugural Global Institute for Disease Elimination in Abu Dhabi.



Dr Qalab Abbas presented three abstracts at the Society of Critical Care Annual Congress, which is the world's largest Critical Care congress.

Probiotics for pregnancy

The **Infectious Disease Research Lab** at AKU will be analysing biological specimens from five participating countries for a set of trials to identify new interventions such as probiotics and live bacterial products to alter the maternal microbiome and improve pregnancy outcomes. **Dr Imran Nisar, Dr Fyezah Jehan and Dr Waqasuddin Khan** attended the experimental platform meeting at BMGF, London.



Bioinformatics training

AKU Paediatrics, LUMS and Wellcome Sanger, UK and Turkey, organized a week-long bioinformatics training at Hacettepe University in Ankara on the analysis of genomics data from pneumococci and Group B streptococci using bioinformatics pipelines. Seventeen participants from Pakistan attended and **Dr Imran Nisar** and **Dr Waqasuddin Khan** were among the facilitators.

Preparing for 2 maternal vaccines

Colleagues from Paediatrics and CHS attended the Maternal Immunization Platform consortium meeting in Johannesburg. The consortium consists of 4 countries from Africa and one from Asia and is being coordinated by the University of Witwatersrand, South Africa. The aim is to prepare these countries to be early adopters for at least two maternal vaccines, RSV and GBS, by taking a multisectoral and multisystem approach



Handheld ultrasound devices, portable MRIs

Dr Zahra Hoodbhoy's team was in Zambia for PRISMA (Pregnancy Risk, Infant Surveillance and Measurement Alliance) training. PRISMA collects data across 5 South Asian and African countries to gauge risk and develop ways to optimize pregnancy outcomes for mothers and newborns. They are training in Hyperfine, which is a portable MRI system.

The **FAMLI project** team along with the study sonographer underwent a week-long training at University of North Carolina, Lusaka, Zambia. She honed her skills in capturing images and adeptly conducting blind sweeps using a hand held ultrasound probe. This immersive learning is a step towards building a machine-learning model for gestational age estimation and other ultrasound features during pregnancy.



BMGF and Sibel Health team visit for PRISMA, Doppler and FAMILI

The Gates Foundation and Sibel Health explored possible collaboration with **Dr Zahra Hoodbhoy** at AKU, to implement wireless and portable monitoring solutions for neonatal and fetal care. They came for a tour and to discuss the integration of continuous vital signs tracking and ultrasound monitoring systems (intrapartum monitoring program, neonatal monitoring program) with a user-friendly interface. This is for the PRISMA, Doppler and FAMILI research projects.



Dr Zehra Habib went to Boston to present on capacity-building in Pakistan's rehabilitation services to evaluate **paediatric physical therapy** services and outcomes for children with disabilities and their families in low- and middle-income countries.

Azithromycin and Cefixime treatment for Typhoid in SAsia trial



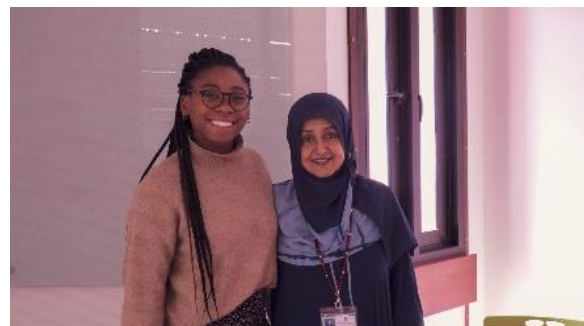
The Oxford University Clinical Research Unit team in Vietnam and Nepal came for a second monitoring visit in the Azithromycin and Cefixime Treatment of Typhoid in South Asia Trial. **Dr Farah Qamar** and **Dr Sonia Qureshi's** team and OUCRU reviewed enrollment, drug dispensing, data management, and ensuring precision in documentation.

Screening for early development

The GSED retreat marked the successful validation of WHO's Global Scales for Early development in Pakistan. GSED addresses a gap in measuring child development for ages 0-3 years. The team is developing and testing the GSED tool as a screener to identify neurodevelopmental impairments in Pakistan and other countries

Serological testing for Shigella

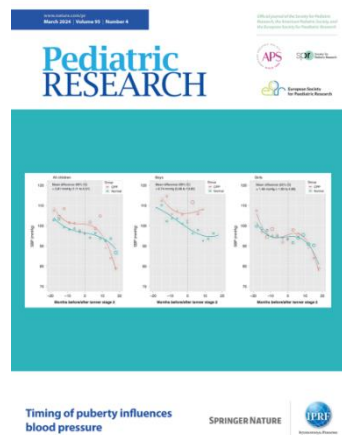
Shigella is a bacterium responsible for dysentery and is linked to stunting in Pakistani children. **Brianna Simone** visited **Prof Farah Qamar** who is leading the Enterics for Global Health Shigella surveillance study for which Pakistan is one of seven designated sites. Briane Simone came to train laboratory teams on the standardization of serological testing for Shigella.



Dr Qalab Abbas has made significant contributions to global health discussions by providing a clear definition of Acute Paediatric Critical illness, which is crucial for facilitating research in the field. His recent publication in *The Lancet* outlines eight markers for acute paediatric critical illness, offering a framework that could optimize PCC services and outcomes on a global scale. Ongoing efforts include the prospective validation of this definition across diverse settings. ([Article Link](#))

Dr Shabina Ariff's article on “Infant growth and body composition from birth to 24 months: Are infants developing the same?”, has been published in the European journal of Clinical Nutrition. ([Article Link](#))

She was also part of a team that has worked on developing a core outcome set for treating Neonatal Encephalopathy. A lack of heterogeneity in outcomes was making it difficult to evaluate the effectiveness of treatments. This paper was published as “:COHESION: a core outcome set for the treatment of neonatal encephalopathy” in Nature. ([Article Link](#))



A debate was stirred up over the definition of NE and she and her co-authors then published a rebuttal to commentary under “Optimising research for neonates with encephalopathy: the role of core outcome sets” a few weeks later. ([Article Link](#))

Grants



Grants Awarded (Principal Investigator)

1	Teaching through simulation based foundation of Paediatric Boot Camp CODE BLUE in a tertiary care centre of a developing country	Naveed Ur Rehman Siddique	INSPIRE	USD 3,000
2	Early childhood development interventions across key areas of the ‘Nurturing Care Framework’ done in Pakistan for children ≤ 5 yrs. measuring child development outcomes. A Systematic Review	Ambreen Nizar	AKU University Research Council (URC)	USD 15,040

Appointments and Promotions



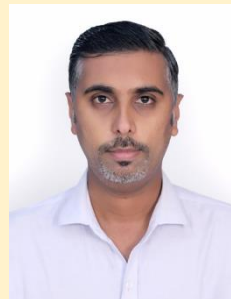
Dr Areeba Sultan
Appointed as Senior Instructor



Dr Shahzaib Khan
Appointed as Clinical Consultant



Ambreen Nizar
Appointed as Senior Instructor
Research



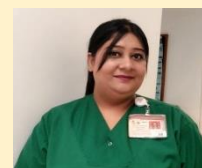
Mr. Khalid Chunara
Appointed as Manager

Appointment of Assistant Head Nurse

Aqsa, a registered nurse since 2016, started her career with a Diploma in Nursing from Liaquat National Hospital in 2017. Beginning as a Nurse Intern in the medicine ward at LNH, she simultaneously pursued a Diploma in Midwifery, completing it in 2019. Aqsa then dedicated five years as a registered nurse at AKUH Garden, specializing in paediatric and neonatal care. In 2023, she earned her Post RN BScN degree from AKUH and currently serves as Assistant Head Nurse at AKUH PWO.

Ms. **Sunita Bahadur** has been appointed **Nurse Specialist**. She has worked as PICU RN, Quality and Patient Safety coordinator and PICU, PCICU Head Nurse.

Ms. **Maria Khan**, an Occupational Therapy doctorate, graduated from DUHS. She conducts group sessions for children at the CDRC



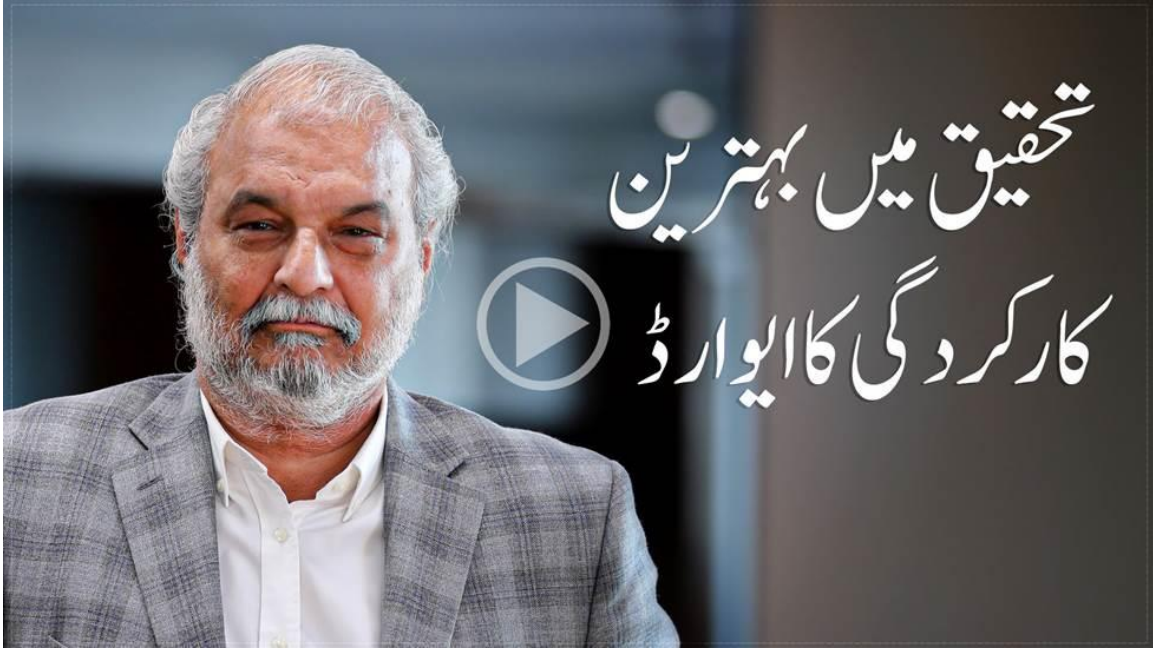
Awards and Achievements



AWARDS @AKU GLOBAL CONVOCATION

Dr Sajid Soofi

Was honored with the University Award for Excellence in Research.



AKU Convocation 2023

Amir Shariff Award for Excellence
in Clinical Teaching



Dr Naveed ur Rehman Siddiqui



Dr Ali Shabbir Hussain

AKU Convocation 2023

Excellence in Teaching Award



Dr Sana Saeed



Dr Danish Aziz

Assistant Professor & Director Paediatric Residency Program
successfully completed his

Master in Health Professions Education (MHPE)
Medical College, Aga Khan University



Dr Naveed ur Rehman and **Dr. Qalab Abbas** were inducted to The American College of Critical Care Medicine.

Dr Naveed ur Rehman received the Presidential Citation Award 2024 from the Society of Critical Care Medicine.

Dr Sana Saeed appointed as Associate Fellow at Association For Medical Education Europe (AMEE) **#AMEE Associate Fellow from Pakistan** Our PICU and PCICU received the **20 weeks of GOLDEN CLABSI free certificate** or central line-associated bloodstream infection, a serious healthcare-associated infection linked to morbidity and mortality. NICU units were honored with **16 weeks GOLDEN CLABSI free certificate.**

Our Nursing staff was recognized with the **10-year service award**, a symbol of appreciation for their dedication to patient care, colleagues, and the institution.

Dr Fyezah Jehan was honored with the Paul Harris Award from Rotary International for her work on malnutrition. [AKU chair receives prestigious award for work on malnourished mothers, children](#)

Events and Visits

Alumni Reunion 2024



Our second **Alumni** reunion gave faculty members a chance to talk about the time they spent as residents at AKU. **Dr Sohail Thobani**, one of the oldest faculty members, said, "In all my years with AKU, I never realized I made such a big impact. Just so you know, I joined AKU in October 1986, with Dr Bhutta being a year senior to me. You can leave AKU, but AKU doesn't leave you. These have been



the best years of my life, especially 1986 and 1989. At the start, there were only six faculty members, and I was part of the founding faculty in 1986." The former president of AKU, **Feroz Rasool**, **Dr Saida Rasool** and **Provost Carl Amrhein** visited WCH for a tour of the Childhood Development & Rehabilitation Centre and the Women & Child Health division.

The Paediatrics Residency Program at AKU has a dedicated Wellbeing Committee to ensure the wellness of its residents. The quarterly Wellness Breakfast gave the committee members a chance to meet and have fun.



The **Paediatric Management Professionals** joined a promotion party hosted by **Mr. Khalid Chunara & Mr. Karim Qamruddin** to celebrate professional achievements.



Paediatrics featured in the media



Faculty multi-lingual videos take off

Our faculty created a record **60 short videos** in two months on common illnesses, in-house innovation, AKU services, special cases and FAQs. These videos ramped up the faculty's visibility online, connecting us in surprising ways to patients, new and old, across Pakistan, with people writing in to request appointments or medical advice. One stand-out example was **Dr Prem Chand's video in Sindhi on Epilepsy** because of which we were approached for appointments at AKU Hyderabad.

<p>(Sindhi) Jhatke ji beemari (مرگہی) جس بیماری 2 weeks ago · 7.5K views Mir Jawad Mujahid MirBahar and 94 oth</p>	<p>Prof. Gaffar Billoo: Tamara balakane bimarithi suraksita rakhava mate... 2 weeks ago · 1.7K views 77</p>	<p>Seasonal viral and respiratory infections in children 4 weeks ago · 54.6K views 649</p>	<p>Bacho ko bukhar ho tou kya karna chaiye How to deal with fever in... 4 weeks ago · 1.1K views 49</p>

Our lab detects JN1

AKUH detects JN.1 Covid variant in samples from Karachi”

<https://www.dawn.com/news/1804962>

Dr. Fatima Mir appeared on on HUM News to talk about the measles outbreak and what parents should do to handle cases. **Dr. Ali Faisal** was on GTV talking about Polio and **Dr Prem Chand** was invited to talk about Epilepsy on World Epilepsy Day by Dawn News.



Newsletter team: **Dr Sana Saeed, Akber Madhwani, Bismah Saleem**
Art and layout: **Obair Khan**

For quick updates head over to our X (Twitter) account [twitter/AKU Paediatrics](https://twitter.com/AKU Paediatrics) or Facebook account Facebook/AKUPaediatrics, Department of Paediatrics & Child Health, The Aga Khan University, Karachi