



Pakistan Air Force Lands Again @ CIME

The enthusiastic medical doctors of Pakistan Air Force once again flew south to the balmy shores of Karachi and joined us at CIME to update their knowledge and improve their clinical skills, this time in Paediatrics and General Medicine.

The General Medicine group worked with broncho-mentor; with task trainers for the practice of lumbar puncture, CVP insertion and urinary catheterisation. Harvey, our ageing Auscultation Simulator entertained and challenged in equal

measure. Meanwhile, the Paediatricians were keen on gaining updates in Neonatal Resuscitation and Paediatric Advanced Life Support (PALS). They also learned how to break bad news to the parents of young patients.

The second day concluded with award of certificates and group photos with the director and Dr. Khalid Siddiqui, Colonel Wing Commander, Air Force. With the promise of creating a new relationship with CIME, the team of Pakistan Air Force took to the northern skies once more.

SeeMe in Singapore!

Exploring the theme "Beyond the Now: Transforming Healthcare Simulation", the S3 Conference in Singapore in October covered a wide array of healthcare simulation topics, such as scenario-based learning, high-performance team training, moulage, virtual and augmented reality, e-learning, and the use of standardized patients in education and training to advance patient safety. The conference provided the perfect opportunity to connect with representatives of companies showcasing their products and facilitated contact with individuals possessing greater knowledge and insight. Such networking was an integral part of the experience. Four abstracts were presented by the CIME team: "Standardized Tools to Design & Evaluate Clinical Simulation Programs, The Clinical Simulation Centre: Test Bed for Innovation & Development, Students as Partners Not Just Learners, & Rising through the ranks: Novice to Expert Within Clinical Simulation".



The presentations were positively received and applauded for effort and ingenuity, while the question & answer sessions found enthusiastic audiences wanting to learn more about the work that was being presented, as well as about CIME itself. A number of individuals expressed a desire to work collaboratively with us: one even asked if there were job vacancies! While it was a great opportunity to learn about the development & progress of simulation in Healthcare Education it was also very evident that CIME is making a huge impact on society and healthcare education in Pakistan when compared to more established simulation centres globally, and their effects.

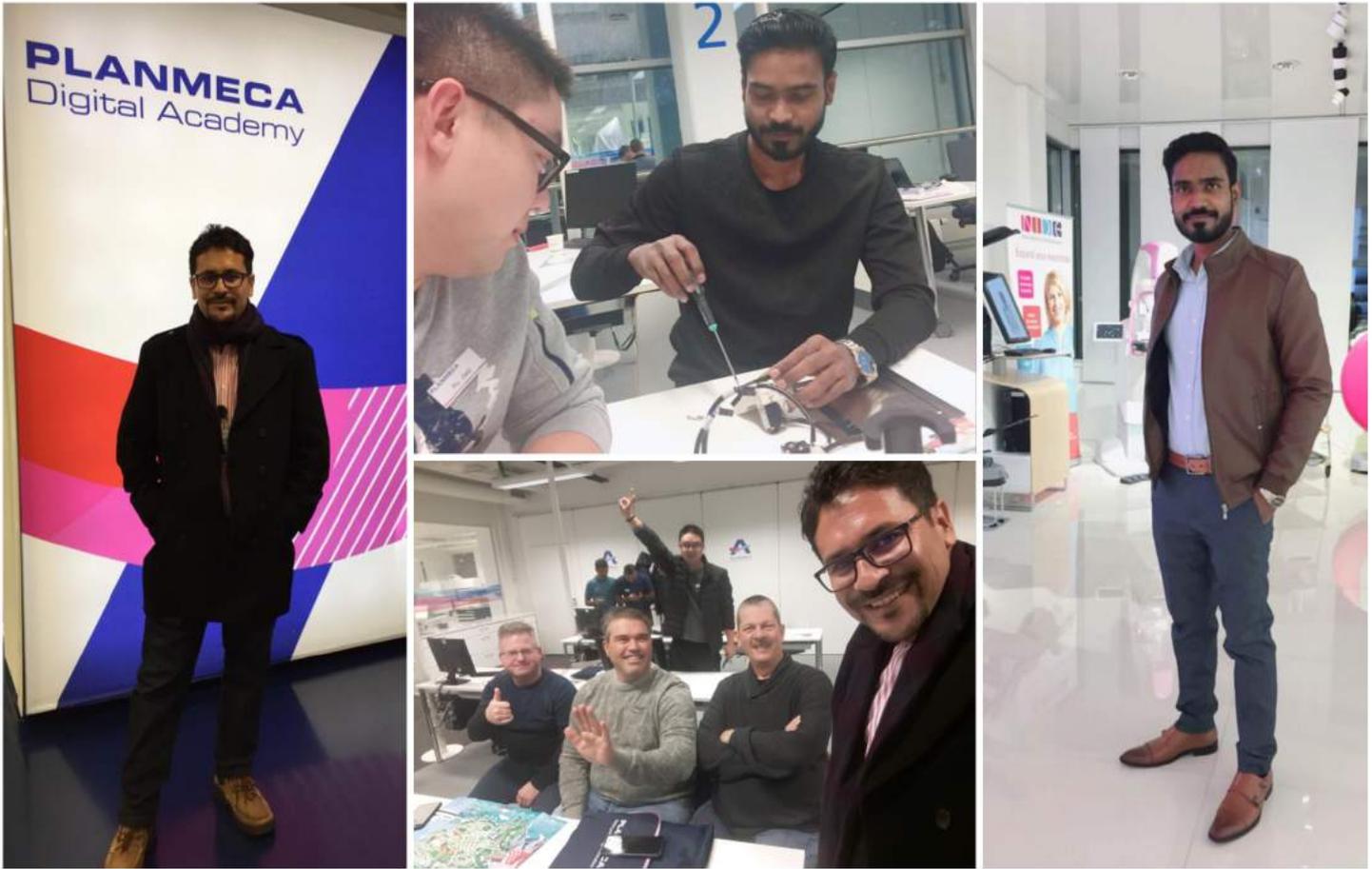


A visit to Lee Kong Chian University Simulation lab was a beneficial aside, and we got different ideas on curricular integration and in organizing learning experiences such as team based learning in their similar, but larger Multipurpose Learning Hall. During the conference, we had time in the evenings to witness the beauty of the island city-state of Singapore & that's when it became apparent that actually, the beauty of Singapore lies everywhere. The 'Universal Studios' simulation experience is as hi-fidelity as you can imagine – with discernible visual and auditory phases of 'briefing' as tension built in the queue for the 'simulated practice' and the adrenaline was palpable as the team excitedly 'debriefed' afterwards. A dinner at Boat Quay and a stroll through the nightlife of Clark Quay were great multi-cultural experiences & then there were the closer-to-home celebrations of Diwali at 'Little India', a historic district of Singapore. All these memories will be cherished especially the mesmerizing Sea Aquarium, a marine realm, home to more than 100,000 marine animals of over 1,000 species, across 50 different habitats. Each one was as fascinating as the next. The Conference and associated activities were an experience not to be forgotten.

Burhan Ali on behalf of the CIME Team in Singapore



SeeMe in Finland!



Two members of CIME's technical team were invited to the Planmecca Dental Simulation Technical Training, in Helsinki, Finland from 18-21 November. This training was essential for the preventive maintenance of the specialized equipment of CIME's Dental Simulation lab. The detailed set-up of the Simulation Unit was followed by training in servicing, parts replacement, adjustment and calibration, yearly maintenance, software upgrades, infection control and feedback sessions with their research and development team.

Interaction with participants from different parts of the world provided an opportunity to learn from their experiences and has expanded our network. We bonded very well with the Planmecca's technical team which will help us in the future in getting the support we need in managing the technicalities of the lab. We will now disseminate knowledge and skills to others in the team to make the level of support more effective and efficient.

Helsinki, the capital of Finland is worth exploring with historical places such as Suomenlinna Fortress, which is a must-visit site in Helsinki. Situated on a group of islands, Suomenlinna was built during its Swedish era as a maritime fortress and a protected base for the Archipelago Fleet. Work on the fortress began in 1748. Our visits to the University of Helsinki, local art museums and monuments produced multicultural experience far beyond expectations. To conclude, the impact of this training on us cannot be exaggerated and the additional benefits have been networking and the formation of a more competent CIME technical team, better prepared to maintain the simulators and the technologies effectively for providing culturally competent service to CIME clients.

Written by
Talha Ahmed Khan

Healthcare Assistants refresh their skills

Healthcare Assistants (HCAs) provide valuable assistance to nurses and work closely with patients to ensure their comfort and safety. This is why it is crucial that they are updated with the latest knowledge and skills. The Kidney and Bladder Service Line in collaboration with CIME offered this one-day refresher workshop for HCAs. The learners were challenged as they performed care in a range of simulation scenarios featuring patients with urological disorders.

The workshop was designed to reinforce the identification of early warning signs, calculate MEWS, the importance of international patient safety goals, policy retrieval, professional attributes, and nursing documentation. Skills stations; positioning, vital signs monitoring, medical equipment handling, activate rush call, were set to provide hands-on simulation experience. HCAs felt that simulation-based training was a unique and beneficial experience for them as it helped in refreshing their skills in patient care.



SPIE's Community Wing in Action! Improving health awareness in the community

SPIE's community wing is dedicated to improving health awareness in the community using simulation tools. This time the Community Wing conducted a workshop on 'First Aid' for the pupils of Dawood Public School on 16th November. 100 school kids attended this workshop where they were first informed about the basics of providing First Aid treatment followed by rotating around scenarios. Burns, fractures, snakebite management, wound care, choking, chest pain and CPR revision were all covered in an exciting and interactive manner.

SPIE is committed towards promoting a culture of teaching and learning within and outside the walls of AKU and we plan to bring in more of these projects with the passage of time!



SimMan takes drugs! Using High Fidelity mannequins for pharmacology teaching



Pharmacology knowledge and skills are integral to nursing accountability in the administration of prescribed medicines. The School of Nursing and Midwifery and the Department of Biological and Biomedical Sciences in collaboration with CIME, organised a simulation workshop for MSc in Nursing (MScN) students, as part of their 'Advanced Practice in Pharmacology' course.

This was engineered through the utilization of our high-fidelity mannequin's automated drug response systems. Yes, our mannequins are 'sensitive' to a library of common drugs, will detect their administration, quantity, dosage, route, through RFID technology and will respond to their effects! Even more fascinating is that these effects can be in real-time or can be manipulated by adjusting the drug's half-life, pharmacokinetics, and pharmacodynamics. All contained within the mannequin's algorithms. Very smart. From now on no-one will be

allowed to refer to our mannequins as 'dummies'.

This workshop enhanced students' capacities to recognize altered body functions specific to particular drug groups, explore relevant pharmacological options, and manage the patient receiving pharmacological interventions. Students learned to recognise patients' symptoms in CIME's simulated emergency room, suggest different diagnoses, provide relevant care and select appropriate pharmacological options. In the simulated environment, participants could assess the patient's response and take corrective steps in the case of limited improvement. As always in the best simulations, critical thinking, communication, and team working were expected and feedback on these attributes was provided during video-stimulated debriefing using Blinex.

Well done! Truly innovative teaching with technology.

Body Mechanics in Patient Moving and Handling An Inter professional approach

Poor posture and body mechanics are the leading causes of musculoskeletal injuries and time off work through backache. This was of interest and concern to CIME's secondee from Nursing Education Service, Ms. Shamsa Ali who was motivated to develop a simulation-based body mechanics workshop to address the issue. With the multi-professional collaboration of CIME, physiotherapists and nurses; participants learned safe moving and handling including lifting technique, transferring, moving and turning patients plus the effective use of equipment. A standardized patient played the role of a paralyzed patient perfectly. The participants were evaluated in groups of three after which they had 30 minutes of debriefing with expert input from physiotherapy. Positive feedback was taken from participants who strongly agreed that this workshop was beneficial to learn about risks in moving and handling and how to do this safely, from the practitioners' perspective as well as patients'.



Urological disorders: nursing care delicately taught through simulation

The Urology and Nephrology Service Line 06, the pacemakers for innovative simulation-based education within AKU hospital, organised a simulation-based workshop on "Care of Patients with Urological Disorders". The aim was to enhance the knowledge and skills of nurses and to develop capacity building for hands-on simulation experience.

The course outline was established after reviewing the European Association of Urology (EAU) guidelines and Lippincott procedural checklists. A thematic approach was taken to organising urological disorders, for example: Cancer, Trauma, Stones, Andrology, Non-Neurogenic Bladder, Pelvic pain management, and nursing considerations. This theory along with skills demonstration on types of catheterisation, stoma care, percutaneous nephrostomy tube dressing and suprapubic catheter care made for a very interesting and well-evaluated workshop.



Training in techniques of Continuous Renal Replacement Therapy (CRRT) Needs Simulation



CRRT is a 24-hour dialysis treatment used in critical care patients with renal failure who cannot tolerate three to four-hour intermittent dialysis sessions. The CRRT machine is an advanced technology operated only by trained critical care nurses, who must understand the principles on which the machine works, circuitry, modes, and troubleshooting. Knowledge and understanding is reinforced through practice and experience, resulting in a more efficient and confident process.

In the past, nurses were taught theory related to the renal system and the functioning of the CRRT machine with demonstration. Later they were expected to show five kit installations on patients, before being deemed competent. This, however, is not practically possible as it is a relatively

rare procedure, resulting in very few nurses having opportunities to fulfil these criteria. A simulation programme with sign-off was developed by Surgical Intensive Care Unit and CIME team. This not only provided trainees an opportunity to achieve competence it also helped in enhancing their learning by eliminating the fear of making mistakes or harming the patient. It allowed an assessment of their efficiency and enabled them to self-evaluate their performance, with feedback highlighting areas of strength and areas for further improvement.

To conclude, CRRT is an infrequent yet critical therapy requiring a combination of technical and theoretical expertise. Simulation is the answer to safe practice and produces proficiency in practitioners.



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Centre for Innovation in Medical Education “Clinical Simulation Educators Programme”

March 2-6, 2020 | 9 am to 5 pm

Learning Space, 1st Floor, CIME

Introduction and Aims

Clinical simulation creates competence and saves lives.

This Programme will equip participants with the skills, knowledge and practical experience to enable informed choices to be made regarding where, how, and when Clinical Simulation is applicable. It is designed for faculty and clinicians who wish their teaching skills to be current, credible and at the cutting edge.

Aga Khan University’s Centre for Innovation in Medical Education is now in its third year of operation and a wealth of experience and internationally gained expertise is now at our fingertips. We are pleased to make this expertise available to colleagues throughout Pakistan.

Teaching and learning strategy

Participants will be actively engaged in challenging but well supported activities. Theory will be provided to the extent that it informs practice. The focus will be on designing, managing, and evaluating clinical skills acquisition through clinical simulation, in all its forms.

Module Descriptors

This programme has 10 modules organised as follows:

Module 1	Simulation modalities and their application
Module 2 & 3	Teaching through simulation
Module 4 & 5	Course design and scenario development
Module 6	Debriefing and providing feedback
Module 7 & 8	Simulation in action
Module 9	Measuring the outcomes of simulation
Module 10	Cultural competence & the ethical dimensions of clinical simulation

Registration

- Rs. 30,000.00
- Register before February 10, 2020
- Limited Registration (First 20 delegates)



The Aga Khan University Department of Continuing Professional Education is accredited by the Pakistan Medical & Dental Council (PMDC) and the American Association of Continuing Medical Education (AACME) to provide continuing medical education.

The (AACME) designates this live educational activity for a maximum of **29.00** AACME Category 1 Credit(s).

The faculty and staff connected to this activity confirm that this activity do not have any relevant financial interest, arrangement or affiliation that would constitute a conflict of interest

