



THE AGA KHAN UNIVERSITY

eCommons@AKU

AKU Newsletters

Publications

7-2001

AKU Newsletter : July 2001, Volume 1, Issue 6

Aga Khan University

Follow this and additional works at: http://ecommons.aku.edu/aku_newsletter

Recommended Citation

Aga Khan University, "AKU Newsletter : July 2001, Volume 1, Issue 6" (2001). AKU Newsletters. Book 23. http://ecommons.aku.edu/aku_newsletter/23

THE AGA KHAN UNIVERSITY Newsletter



VOL 1. NO.6

Aga Khan Receives Archon Award for Promoting Global Health and Welfare

His Highness the Aga Khan, founder of one of the largest private networks of health care institutions in the developing world, received the prestigious Archon Award from the international nursing honour society, Sigma Theta Tau International in June 2001.

The award ceremony was attended by delegates from around the world who gathered in Copenhagen for the 12th International Nursing Research Congress and the International Council of Nurses' 22nd Quadrennial Congress.

The Archon Awards – from the Greek word meaning "the first to lead" – are granted biennially to individuals who, regardless of their profession, have made health advocacy a major aspect of their lives and whose efforts have created significant change that is far-reaching in scope.

The award citation highlighted the Aga Khan's "leadership in promoting global health and welfare and for his compassionate support of nursing and nursing research in developing countries." Calling the occasion "a unique moment – not only for nursing, but for health care", the Society's President, Patricia Thompson, described the Aga Khan as a "remarkable *Contd. overleaf*



His Highness the Aga Khan acknowledging the honour from Sigma Theta Tau President, Patricia Thompson, at the Archon Award ceremony held in Copenhagen.

Government of Pakistan Appoints Task Force for Improvement of Higher Education Private Universities to Provide Leadership and Share Experiences

Last April, the Federal Minister for Education, Zobaida Jalal, appointed a Task Force co-chaired by Dr. Shamsh Kassim-Lakha, President, AKU, and Syed Babar Ali, Pro-Chancellor of the Lahore University of Management Sciences, to provide recommendations for improvement of higher education in Pakistan.

Task Force members include the Federal Secretary of Education, the Chairman of the University Grants Commission, Dr. Camer Vellani, Rector, AKU, and nine vice chancellors of public and private universities, so that lessons could be learnt from their diverse and rich experiences.

Of the six consultation seminars planned in the four provinces and the Federal Capital, Islamabad, the Task Force has already held two in Karachi and Quetta. The seminar in Karachi on June 19, 2001 was hosted by AKU, where members of the Task Force met with heads of universities, degree colleges and higher secondary schools, to discuss ways of improving higher education. Some 75 heads and representatives of educational institutions and members of the Task Force participated in discussion groups dealing with such topics as efficiency and quality *Contd. overleaf*

HIGHLIGHTS Dr. Dodani Awarded Scholarship for Graduate Studies Medical Student Bags Silver in All Pakistan Psychiatry Exam Nurses Raise Voice Against Violence on Nurses Day Special Lecture: Bapsi Sidhwa on 'Where is Home?'

instarton on-site meaning in Main and Karimabau	
Patient Welfare Programme	5
Nadeem M. Khan – First National DG and CEO of AKUH	6
Gastroenterology Section is State-of-the-Art	7
Federal MinisterAttends PDC Graduation Ceremony	8
Governor of Osh on Campus	8

Aga Khan Receives Archon Award

Contd. from page 1

individual who, during the course of his distinguished life, continues to leave upon world health, an indelible mark of a world class leader." Acknowledging the honour accorded him, the Aga Khan said that he had "long felt the enhancement of the nursing profession to be absolutely critical to the improvement of health care in the developing world and the Islamic world."

Looking back on the state of health in Pakistan during the early days, the Aga Khan explained the underlying notion that led to the creation of a standard institution in Pakistan: "I felt it particularly important to create an institution in the country that could offer education in the health profession at international standards. This would ensure that the teaching and research programmes would not only be of the highest quality, but would also be grounded in local needs and realities, and that, if properly funded and led, could make a distinctive contribution on a permanent basis. In addition, a successful national institution would have the potential to provide leadership directly and through its graduates that would be felt in the professions and also in society more generally."

He added that "because women constitute an overwhelming number of nurses in the developing world, the Board of Trustees of AKU felt that the School of Nursing could foster the enhancement of nurses, and women professionals more generally, empowering them and increasing their standing and effectiveness in society."

He explained that "the way forward was to professionalise, institutionalise and to dignify nursing" in Asia and Africa. Proud of the way AKUSON has reached out to assist professionals in other developing countries, the Aga Khan said, "more and more women are coming forward to join the (nursing) profession. By adding programmes that lead to Bachelor's and Master's degrees in Nursing for the first time in Pakistan, the School is providing opportunities for career advancement that were out of reach for nearly everyone in the profession in the country."

Underlining the essentiality of international linkages, the Aga Khan hoped that the relationship of AKUSON with foreign educational institutions, such as McMaster University and the Canadian International Development Agency, would continue to remain important as AKU matures and increases contributions to such relationships, as well as being the beneficiary of them.

Past recepients of the Archon Awards have included Dr. Jonas Salk, famed for his extensive research in the development of polio vaccine in the 50's; Elizabeth Dole, President of the American Red Cross; Dr. C. Everett Koop, the internationally recognised paediatric surgeon, and Dame Cicely Saunders, who had pioneered the hospice and palliative care movement across the world.

Task Force for Improvement of Higher Education

Contd. from page 1

assurance, research, students and alumni, governance and management, financial and physical resources. Each group identified factors that could improve higher education and presented its recommendations for discussion by all participants.

Commenting on the recommendations made by the working groups, the Finance Minister of Sindh, Dr. Abdul Hafeez Sheikh, stressed the need to focus on a few pivotal changes in higher educational policies that will have a significant impact on improving the quality and correcting problems. He urged the Task Force to implement its confirmed recommendations without waiting for the final report, citing finance and governance as two critical areas for early focus.

The Governor of Sindh, Mohammedmian Soomro, stressed the importance of merit-based selection of both students and faculty. He endorsed the Finance Minister's comments and assured the support of his government for implementing the recommendations of the Task Force. Co-chair, Dr. Kassim-Lakha emphasised the need to recommend specific and practical solutions for obstacles to improvement of higher education. The seminar in Quetta was held on July 18, 2001 and its first session was presided over by the Governor of Balochistan, Justice (Retd.) Ameer-ul-Mulk Mengal, who assured his government's full support to the Task Force in its efforts to improve higher education. On the conclusion of the series of seminars, and following consultations with Lederal and Provincial authorities, the Task Force is expected to submit its final recommendations to the Government of Pakistan in December 2001.



His Excellency the Governor of Sindh, Mohammedmian Soomro, addressing the heads of public and private universities and colleges, heads of selected higher secondary schools and chairs of Examination Boards in Sindh, at a seminar on 'Improvement of Higher Education in Pakistan'.

Dr. Sunita Dodani Awarded Scholarship for Graduate Studies by Aga Khan Foundation Canada

Dr. Sunita Dodani '92, Assistant Professor in the Family Medicine Division of the Department of Community Health Sciences (CHS), was awarded the Aga Khan Foundation Canada scholarship for graduate studies.

She is currently pursuing a Master of Science degree in Community Health and Epidemiology, with an emphasis on Clinical Epidemiology at Dalhousie University in Nova Scotia, Canada. Although Dr. Dodani already has a number of publications to her credit in the fields of clinical medicine and quality of care, this training will strengthen her research skills in these important areas of application. Dr. Dodani also has the distinction of being one of the first medical graduates to be recognized (March 1997) by the College of Physicians and Surgeons of Pakistan (CPSP) as a specialist in the new discipline of Family Medicine.

Until her recent departure for M.Sc. studies, she served as a coordinator for the Family Medicine residency programme at AKU, in addition to undergraduate and continuing medical education teaching programmes. She has also participated in an international workshop on 'Excellence in Teaching', organised by the Royal College of General Practitioners, UK. Dr. Dodani has a high energy level, and takes keen interest in developmental

Medical Student Bags Silver Medal in All Pakistan Psychiatry Examination



Dr. Shamsh Kassim-Lakha, President, AKU, presenting the cash award to Nadia Kahiruddin Ali. on behalf of President General Pervez Musharraf.

activities within and outside the University, such as her active participation in the Postgraduate Medical Education Committee and the Heart Health Committee (a collaborative effort with the Aga Khan Health Service, Pakistan). She has also served as Director of the College of Family Medicine, Karachi.



Dr. Sunita Dodani providing holistic care to a patient at the Community Health Centre.

Nadia Kabiruddin Ali, an AKU medical student of the Class of 2001, received a silver medal and a cash award of Rs. 75,000 from the President of Pakistan, General Pervez Musharraf, in the All Pakistan Gold Medal Examination in Psychiatry, at the concluding session of the 13th International Psychiatry Conference at Rawalpindi, in January 2001.

Nadia was one of 18 students from nine medical colleges in the country participating in the examination.

Nadia is nearing completion of her final year M.B.,B.S. programme, where she has been among the top students of the class. She has also secured honours in Psychiatry and ENT.

A bright and committed student, Nadia takes keen interest in extra-curricular activities and regularly participates in debates and declamation contests. In October 2000, she won the first prize in an Inter-University Debating Contest organised by Greenwich University.

When asked about her plans for the future, Nadia said, "I will shortly be going for my electives to the University of Texas in Houston and plan to spend my prize money on accomplishing this mission, which will go a long way in establishing my career as a dedicated and skilled physician."

UNIVERSITY

Nurses Raise Voice Against Violence on International Nurses Day

Nurses at AKU celebrated International Nurses Day on June 1, 2001, by highlighting a major problem that affects their work and lives. Every year, around the world, the day commemorates Florence Nightingale, founder of modern nursing. This year, the day was marked by the theme: "Is Violence a Preventable Disease in Health Care Settings in Pakistan?"

Explaining the importance of the theme, Raisa Gul, Director Diploma Programme, AKU School of Nursing (AKUSON), stated that violence is a major public health problem that is overtaking infectious disease as the main cause of morbidity and premature mortality worldwide. Each year more than two million people die as a result of injuries from violence. themselves might get entangled in the process." Accentuating the need to have policies and laws at top levels to ensure proper protection for women, Awan said, "We should have a comprehensive campaign to combat violence against nurses in Pakistan, so that they can feel safe at work." He also stressed that besides creating awareness amongst women, it was important to educate the perpetrators.

In her address, Khurshid Khowaja '84, Acting Director Nursing Services, AKUH, said, "Families are reluctant to send their girls into nursing, as the profession is perceived to have a negative image, a poor salary structure, and unsafe environment". She added that AKU has taken a leading role in overcoming these issues.



Participants viewing posters on violence against women and nurses, during the seminar on International Nurses Day at AKU.

Speaking in the context of the theme, the chief guest, Zia Awan, President of Lawyers for Human Rights and Legal Aid, explained and alluded to the acts of violence committed against women, and nurses in particular, in their home settings as well as in workplaces. Lamenting that much of the violence against women, and nurses especially, went unreported, he explained: "Even the police do not help much ... people are afraid to report violence to the police, as they fear they Many nurses and other professionals presented papers relevant to the theme. Afshan Nazli, an instructor from the Jinnah Postgraduate College of Nursing, presented an analysis of the nurses' work environment in the public sector. Discussing the predisposing factors of violence, she said that low nurse-patient ratios (i.e. 1:30-40), the influx of political gangs, and the non-availability of drugs and equipment were found to play a major role.

Special Lecture Bapsi Sidhwa on 'Where is Home?'

Internationally recognised author of English fiction, Bapsi Sidhwa, spoke to a captivated audience on 'Where is Home?' at AKU in April 2001. It was the third in the series of special lectures held by the University as part of its policy of imparting broad-based education to its students, faculty and staff, and giving them a chance to benefit from interaction with outstanding speakers. In the series, AKU invites eminent personalities to shed light on meaningful and challenging topics of public interest. During her talk, Sidhwa suggested that books by Pakistani writers should be included in the universities' curricula.

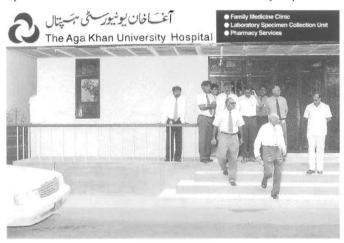


Bapsi Sidhwa is signing her books for enthusiastic students.

First AKUH Off-Site Health Facilities in Malir and Karimabad

The Aga Khan University Hospital (AKUH) launched its first off-site health facility in Malir in May 2001. The facility offers Family Medicine Clinics, Pharmacy and Laboratory services. Through this development, AKUH will apply the learning and experience of its physicians in resolving the health problems and needs of families living in different parts of the city.

AKUH now has two off-site clinics in Karachi, one in Karimabad, in collaboration with the Aga Khan Health Service, Pakistan (AKHS,P), the other in Malir. In addition, the Hospital operates 29 Laboratory Specimen Collection Units throughout Pakistan, including 12 in Karachi. Specimens collected from all the Laboratory Specimen



AKUH's first off-site facility in Malir — Family Medicine Clinic, Laboratory Specimen Collection Unit and Pharmacy services.

Patient Welfare Programme Rukhsana's Sorrow Turns to Joy

Local practitioners in Skardu could do little to cure Rukhsana, a 26-year old housewife suffering from a thyroid nodule for the last five years. As her illness took its toll, Rukhsana became lethargic and dull; she remained in severe depression and despair, with no hope of a cure. Her husband divorced her, and Rukhsana moved to her parents' house with her two children.

Her parents' savings were not enough to cover the cost of her treatment at a hospital in a nearby town. Her father kept taking her to general practitioners in the area, but her condition did not improve. Eventually, her sister suggested taking Rukhsana to Karachi for treatment.

On reaching Karachi, Rukhsana was advised to visit AKUH where doctors would be able to properly diagnose and treat her. She was reluctant on account of her financial constraints, but on her sister's insistence, she finally came to AKUH for consultations. Diagnosing her serious condition, the physician prescribed immediate surgery for left thyroid lobectomy. Rukhsana dreaded the expense the surgery might entail, but Collection Units are transported to the Main Laboratory in strict conformity with international standards. Pharmacy services are run under the supervision of a pharmacist, who holds a Bachelor's degree in Pharmacy, and also provides information related to drugs and their proper usage.

All three services of the health facility in Malir are available six days a week, Monday through Saturday, while the Laboratory also remains open on Sundays. Commenting on the off-site facility, Dr. Riaz Qureshi, Professor and Head of Family Medicine Division, Community Health Sciences (CHS), said, "This facility caters to the residents of Malir by providing high-quality and cost-effective outpatient medical care. Through this newly established facility, AKUH is continuing its mission of providing accessible and affordable care to patients of all socio-economic groups." Additionally, the facility maintains a system of medical records to enable attending physicians to provide continuing guidance and advice to families based on the history of their medical problems. Patients requiring specialized medical consultancy are referred to AKUH.

In Karimabad, specialist physicians and surgeons from AKUH provide consultations and conduct day-care surgeries at the Karimabad Day-Surgery Centre, which is equipped with laboratory, ultrasound and X-ray facilities. These facilities are providing people in the adjoining areas of Karimabad easy access to high quality health care.

Such developments bring AKUH a step closer to its goal of providing quality health care to a larger population in the city.



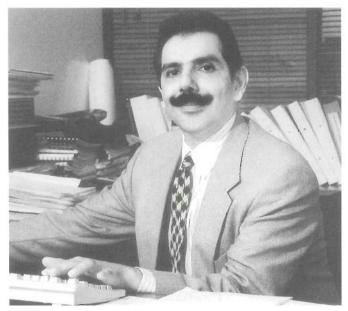
the Hospital welfare officer gave a positive response and encouraged her to seek financial support from the Patient Welfare Programme. Rukhsana's surgery was performed at a cost of Rs. 24,000 (US \$370). With the help of friends, her sister was able to raise Rs. 12,200 (US \$187) and the balance was supplemented by the Patient Welfare Programme.

It was not long before Rukhsana emerged out of the clouds of gloom and despair. Restored to health and happiness, she returned to her village to embrace her anxiously awaiting children.

Nadeem Mustafa Khan – First National Director General and CEO of University Hospital

Nadeem Mustafa Khan is the first Pakistani Director General and CEO of the Aga Khan University Hospital in Karachi.

He graduated from Peshawar University, where he secured a first position (Gold Medal), followed by a three-year B.Sc. (Econ.) Honours from the London School of Economics. Having completed his training in chartered accountancy from Price Waterhouse and Company, he joined the Aga Khan Hospital and Medical College Foundation in 1981, as Assistant Manager, Finance and Administration. He rose to become the Director, Finance and Information Systems in 1987, moving two years later, to hospital operations as the Director, Professional Services. In 1997 he was appointed the Chief Operating Officer.



You are often referred to as a "quality guru" in Pakistan, do tell us about your quality journey.

Our rewarding journey of continuous quality improvement began in 1993. It involves focusing on the processes of work, using both internal and external customer focus, looking at data and improving continuously. All groups of faculty and staff have participated in improvement through teams, collaborating groups, quality circles and task forces. It has continuously helped us in improving our standards. We obtained a certification under ISO 9002 for six areas in 1999 and for the entire Hospital in June 2000.

What are the challenges in trying to maintain internationally accepted standards of patient and medical care?

We face a number of challenges in staffing, quality and cost. As the world becomes a global village, there is massive attrition in our trained manpower, particularly nurses, who are attracted to centres in the developed world. Similarly, technicians are in short supply in our country as they succumb to similar attractions in the Middle East. Retaining faculty is also difficult. Thus, maintaining a well-qualified and well-trained group of individuals to perform regularly over an extended period of time is a major challenge.

Health care is a service and providing this service imbued with all the ingredients of compassion, proper communication and teamwork is a definite challenge. The health providers, whether consultants, resident staff, nurses, technical and support staff, have to work together as a team bringing all these "knowledge workers" together to provide the best possible care.

Regularity and consistency in standards is essential and reducing variation in the quality of care and services also remains a major challenge.

Other resources such as availability of equipment and supplies are still further challenges. Health care is expensive and a major challenge is to ensure that costs are contained.

Is the Hospital accessible – physically as well as financially, to the general public?

The question of costs is central in the equation for access. We continue to monitor our costs and keep them under control. Our users come from all sections of society – our continuous surveys show that 70% of our patients are drawn from the middle and lower socio-economic groups. The Hospital has also tried to make itself physically accessible by moving out into the community. We are operating 12 Laboratory Specimen Collections Units dotted throughout Karachi and 17 in other major cities of Pakistan.

We are collaborating with the Aga Khan Health Service, Pakistan (AKHS,P) in running clinics and performing day surgery at Karimabad, running clinics in Garden and Kharadar as well as Family Health Clinics in five centres in Karachi. We have also started a joint Family Clinic, Laboratory Specimen Collection Unit and Pharmacy in Malir, a low middle-income area. These efforts are aimed at making our Hospital accessible to the community at large, both physically and financially, which is our institutional mission.

Do tell us about future plans for maintaining high standards of health care and meeting the needs of patients.

The Institution is constantly raising its bar on quality and standards. The Hospital is currently preparing itself for the US Joint Commission International Accreditation (JCI) standards and in this regard the JCIA team of consultants has also carried out a pre-assessment. We intend to focus on the areas of improvement in our patient care delivery and service, which will be to the ultimate benefit of patients. The focus continues to be on the needs of the patients – we have to continually update ourselves in knowing their needs through various surveys carried out on a biannual basis. We have started a home-based physiotherapy service to assist patients in providing care in their homes and are about to

launch into a pilot home health programme, whereby general wound and dressing care, catheter care, intravenous antibiotics and fluid therapy can be administered in the homes of patients who have been discharged from the Hospital. This is an ongoing process of meeting the needs of our patients.

Gastroenterology Section is State-of-the-Art

The clinical speciality of gastroenterology is devoted to diseases affecting the digestive system. These include common medical conditions such as peptic ulcer and other acid related diseases; functional bowel problems; biliary diseases; liver diseases such as cirrhosis and hepatitis B and C; inflammatory bowel disease such as Crohn's disease; and gastrointestinal cancers like stomach, liver, colonic and pancreatic cancer. Remarkable strides have been made in the scientific understanding of these diseases and modern gastroenterologists are able to offer a range of advanced diagnostic procedures and effective therapeutic remedies to patients suffering from such disorders.

Gastroenterology has been an important part of AKUH's clinical services from the very beginning and was formally organized as a section within the Department of Medicine in 1995. The Section is headed by Professor Wasim Jafri, who specialized in gastroenterology in the UK and also obtained advanced clinical training in liver diseases at the University of Miami, USA. Other members of the Section are Associate Professors Dr. Saeed Sadiq Hamid, trained in the UK and at the University of Texas, USA, and Dr. Hasnain Ali Shah, trained at the University of Edinburgh, UK,

Gastroenterology at AKUH offers ambulatory services, clinical consultation, inpatient care and specialized diagnostic



L to R: Dr. Saeed Sadiq Hamid, Associate Professor, Dr. Wasim Jafri, Head of the Section, and Dr. Hasnain Ali Shah, Associate Professor, at AKUH's Endoscopy Suite.

procedures comparable to other leading hospitals in the world. In addition, important service innovations are planned. A gastrointestinal physiology centre will soon be ready to provide assessment of esophageal, pancreato-biliary and anorectal motility, 24-hour esophageal pH monitoring, and tests of intestinal absorption and gastric and pancreatic function. Other service expansions will include endoscopic ultrasound and enteroscopy, which are advanced techniques for evaluating the fine structure of the intestines and their connections.

As with other clinical services at AKUH, teaching, training and research are key elements of the Section's activities. There are weekly academic conferences and an advanced clinical rotation for senior medical students. The Section also holds symposia and continuing medical education (CME) courses for the medical community which are popular and attract large audiences. AKUH gastroenterologists are also deeply involved in medical research on unsolved clinical problems in hepatitis B and C, liver cirrhosis, portal hypertension and inflammatory bowel disease.

An important academic obligation for any leading speciality clinical service is to train the specialists of tomorrow. AKUH Gastroenterology satisfies this obligation through its clinical fellowship programme in which doctors already specialized in internal medicine are enrolled in a three-year programme of sub-specialization in preparation for the F.C.P.S. examination in Gastroenterology.

Commenting on patient resources, Professor Jafri said, "Our section is proud to serve the patient community and their families. We provide state-of-the-art evaluation and treatment services and deliver quality patient care."

Dr. Hamid adds, "Our faculty is committed to leadership in education for our dedicated practising physicians, medical students, and allied health professionals. We seek to uphold the highest standards in training for the next generation of health care providers."

Dr. Shah stresses that the faculty is implementing the University's mission to expand the boundaries of medicine through research. He said, "We strive to continually advance our understanding of patient problems at all levels, and continue to introduce innovative, safer and more effective methods of treatment."

IED

Federal Minister Attends PDC Graduation Ceremony

The Federal Minister for Education, Ms. Zobaida Jalal, attended the graduation ceremony of the Whole School Improvement Programme (WSIP) on May 3, 2001, at the Professional Development Centre, Northern Areas (PDC,N) in Gilgit.

PDC,N, a project of the Aga Khan Education Service, Pakistan (AKES,P), is currently being managed by AKU's Institute for Educational Development (AKU-IED). It commenced operations in early 1999 and its objective is to provide teachers with professional development in this mountainous region. Accompanying the Minister was the Chief Secretary for Health, Education and Local Bodies, Northern Areas, Mr. Mehr Dad, and other government officials. Ninety-six teachers from government, private and AKES,P schools, participated in WSIP. The programme included generic and specific themes related to the teaching of science, mathematics, social studies and language within the domain of primary education. Eighty-four participants completed the programme satisfactorily and were awarded AKU-IED Visiting Teacher (VT) certificates. It was a historic moment for PDC,N, making it the first time since its inception that VTs were awarded certificates.

The Minister commended the role of the Aga Khan Development Network (AKDN), which is a group of institutions working to improve living conditions and opportunities in specific regions of the developing world. Ms. Jalal announced that the Federal Government has approved the establishment of an examination board by AKU, and that it is working closely with the University for the improvement of teacher education and the development of a new, improved curriculum.



Education Minister Ms. Zobaida Jalal with a group of Visiting Teachers and graduates at the Professional Development Centre, Northern Areas, Gilgit.

Governor of Osh on Campus



His Excellency the Governor of Osh Province of the Kyrgyz Republic, Naken Kasiev Kasievich (right), on a tour of AKU. The Governor also visited AKU Institute for Educational Development and discussed with faculty the role of the Institute in improving the performance of teachers through their professional development in private and government schools.

SCHEDULE OF EVENTS

Programme		Date
CME		
Gastro/Infectious Diseases	July 24 - 26	
Obstetrics & Gynaecology		Aug 23
Laboratory Diagnosis/Interpretation	Sept 25 - 27	
Clinical Nutrition	Oct 26	
Workshop		
Update in Transfusion Medicine and Haemostasis		Aug 22
· Molecular Biology		Sept 18 - 22
'Signs, Symptoms and Care'		
- Public Health Awareness Progra	mme	
General Surgery		July 28
· Urology (Hyderabad)		Aug 17
Paediatrics		Aug 25
Neurology		Sept 22
Palpitation		Oct 27
National Symposium		
· Current Challenges in Oncology		Sept 17 - 18

Published quarterly by the Public Affairs Department, The Aga Khan University, Stadium Road. P.O. Box 3500. Karachi-74800. Pakistan. Telephone: 493-0051, Fax: (92) 21-493-4294. email: public.affairs@aku.edu. Printed at (\$Elite Publishers Limited, Karachi.