The French Medical Institute for Children
A Medical Centre of Excellence in Kabul

Health care statistics for Afghanistan paint a grim picture. One child in four does not reach the age of five. In some districts, there is one doctor for 50,000 people, compared to one for 303 in France and one for 356 in the USA. Some large districts do not even have one medical doctor. More than 90 per cent of the private pharmaceutical outlets surveyed had only five key essential medicines in stock. As the statistics suggest, the entire Afghan health care infrastructure needs to be rebuilt, from top to bottom. The Aga Khan Development Network has been assisting in the rebuilding process through its private, non-profit health programmes, which include training for Community Health Workers, the construction and rehabilitation of Basic Health Centres and provincial referral hospitals providing secondary and specialist services. An innovative four-way public-private partnership between the Government of Afghanistan, the Government of France, the French NGO, La Chaine de L'Espoir and AKDN (through Aga Khan University) has laid the foundations for the creation of a tertiary medical centre of excellence. As part of the healthcare rebuilding strategy, it is intended that this centre will eventually serve as an important referral centre for provincial hospitals, provide subsidised healthcare for poor patients and chart a course towards a sustainable healthcare system for Afghanistan.

Development Partners

Government of Afghanistan
Government of France
La Chaine de l'Espoir
Aga Khan Development Network

FMIC

In 2001, La Chaine de l'Espoir, conceived the idea of building a maternal and child hospital that would be a self-managed training centre, and a referral hospital which would contribute to the restoration of the Afghan healthcare system. The first phase of the hospital, the French Medical Institute for Children (FMIC), was built on land donated by the Government of Afghanistan. It was officially opened in April 2006 under the management of Aga Khan University.

When it opened its doors, it was already offering healthcare of the highest standard in the country, on a par with the best medical institutions in the region. In its initial phase it provided paediatric surgical care, including general and orthopaedic surgery. It now also provides paediatric medicine and plastic surgery, cardiology, neurosurgery, cardiac surgery and anaesthesia. Its laboratory, affiliated with Aga Khan University Hospital in Karachi, has expertise in microbiology, haematology, serology, and biochemistry. The hospital is equipped with state-of-the art CT scanning facilities, general radiology and ultrasound. The University Hospital is providing key hospital management staff, who are both Afghan and expatriate personnel. As training programmes are completed, more Afghans will assume roles in the hospital's operations. Afghan surgeons will be trained in France and at the University Hospital in Karachi.

The French Government has brought in core expatriate medical staff in general paediatrics, paediatric general surgery, anaesthesia and radiology. Through short-term rotational missions, La Chaine de L'Espoir has provided surgeons, nurses and technicians from France and elsewhere in Europe, and from North America. One of the immediate aims of the hospital is to contribute to the Millennium Development Goal of reducing child mortality. Heart disease and other conditions among Afghan children can now be addressed through surgery.

Bhasker Solanki

The Aga Khan University

Founded in 1983, the Aga Khan University has already had a wide impact, particularly in the health sciences. Currently, AKU has teaching sites in Pakistan, Kenya, Tanzania, Uganda and the United Kingdom, as well as in Afghanistan where it is delivering medical, nursing and midwifery training.

AKU's contributions to nursing have been significant, leading to a marked improvement in nursing education and patient care in Pakistan, Afghanistan, East Africa and Syria. In Afghanistan, AKU developed the national nursing curriculum and established professional nursing standards. It implements the midwifery programme in the National Institute for Health Sciences and is currently in the process of implementing postgraduate medical education at Kabul Medical University, the curriculum for which has been approved by Afghanistan's Ministry of Public Health.

A New Standard in Health Care

In March 2009, FMIC became the first and only healthcare institution in Afghanistan to meet the standards for ISO 9001:2008 quality management systems. ISO 9001:2008 is a global benchmark providing assurance of the ability to satisfy quality requirements. By achieving this certification, FMIC has raised the quality of health services offered in Afghanistan.

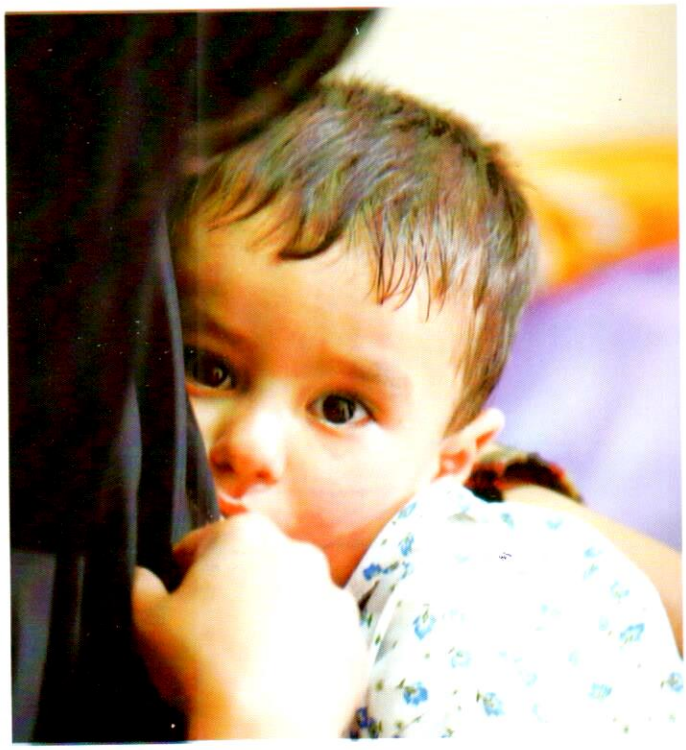
Access to All

To ensure that health services are accessible to all Afghans, FMIC has instituted a welfare support programme that subsidises health services for poorer patients. Between 2006 and 2008, the treatment fees of over 38,700 patients were paid either entirely or partially by the welfare programme, at a cost of US$ 3.6 million. An additional US$ 13 million has been spent on hospital operation costs.

Building Local Capacity

FMIC's overarching aim is to develop nursing, paramedical staff and physicians - a pool of qualified professionals in all areas of healthcare delivery, leadership and administration, who can become responsible not only for the operations of the Institute but also improve the quality of healthcare professionals in the country.

On-site training is being complemented by short and long-term missions to France and Pakistan. Since 2008, 43 Afghan national members of staff have trained overseas in paediatric and cardiac surgery in France at Necker Hospital, anaesthesiology in India and training in nursing and quality improvement in Pakistan Aga Khan University Hospital, Karachi. Offsite training in Kabul has also taken



place through partnerships with the Ministry of Public Health's Institute for Health Sciences, Roshan and the NGOs Focus Humanitarian Assistance and Handicap International. On-site training in cardiac, orthopaedic, general and plastic surgery has taken place through 42 short-term foreign missions between 2006 and 2008. The accreditation of one of FMIC's Afghan surgeons to perform closed heart surgeries in March 2008 is noteworthy.

In 2009 and 2010, more than 100 Afghan national staff (nurses, laboratory technicians, radiology technicians, pharmacists, bio-medical engineers and doctors) will be selected for training.

Developing Nursing Capacity

Nursing education at FMIC is building on six years of technical support provided by Aga Khan University's School of Nursing to the Institute for Health Sciences in curriculum development and implementation, clinical practice and the establishment of professional nursing standards. In 2008, FMIC's Nursing Education Service organised 222 continuing education trainings for its nurses in areas identified through a needs assessment. In addition, training support is provided to the Institute for Health Sciences, and nurses graduating from their programme are given placements. Long and shorter-term missions from La Chaine de l'Espoir are also contributing to on-site training of local staff. The University Hospital in Karachi provides clinical placements for nurses for specialised clinical training.

E-Health

FMIC is using e-health technology to improve diagnostic services and to support other health institutions in Afghanistan.

Since the start of FMIC's teleradiology services, 270 CTs have been sent to the University Hospital in Karachi for a second opinion. FMIC recently entered into an agreement with the Bamyan Provincial Hospital, managed by the Aga Khan Health Services, to provide e-support for continuing medical education, departmental training and bio-medical facilitation. The

University Hospital in Karachi will also support continuing medical and nursing education at Bamyan Hospital.

An e-health strategy is currently being developed to enable additional training and transfer of expertise in the region, supported by Roshan, Afghanistan's premier mobile phone operator, and CISCO. This will expand the availability of quality healthcare in the provinces, contributing to improving health systems in the country.

Future Expansion

AKDN and its partners have been working to help rebuild the Afghan healthcare infrastructure. AKDN programmes include curricula and training for community health workers, midwives, nurses and doctors and the construction and rehabilitation of health centres, hospitals and the national institutes of health. The French Medical Institute for Children is the beginning of a tier of high-quality tertiary services; it will eventually be developed into an important regional referral hub and tertiary medical and academic centre of excellence.

Maternal and Child Care

In the first phase of expansion, the French Medical Institute for Children will grow into a mother and child hospital as originally envisioned by its founders. The maternal facility will provide superior obstetric and gynaecological care, and also contribute to the training and qualification of healthcare professionals. It will function as part of an integrated health delivery system interconnected with health services within Afghanistan and the region. In line with national priorities, the hospital will contribute to health promotion and disease prevention, and play a leadership role in developing women's health services in the region.

Bhasker Solanki

Expanded Health Complex

Plans are already underway to create an expanded health complex with an academic health sciences centre on additional land which has been committed by the Government of Afghanistan. This will be a tertiary medical centre of excellence and provide both health services and education. It is part of a vision for an integrated health delivery system which would entail Aga Khan Development Network's participation and support of provincial population-based community, primary and secondary care. In this context, the centre in Kabul would serve as an intellectual and tertiary service hub of an integrated system in Afghanistan and potentially other parts of the wider region.

The expanded health complex will:

- Provide complete medico-surgical services and a multi-purpose diagnostic centre;
- Offer care in selected specialties and sub-specialties with potential expanded partners in the form of Institutes (following the model of the French Medical Institute for Children);
- Aspire to achieve the highest level of economic sustainability while providing high quality and accessible healthcare;
- Play an important role in training and qualifying health sector professionals who will lead and work in the reconstruction of the country's health system;
- Be a real actor in the evolution of the Afghan health system by providing leadership, capacity building and research;
- Contribute to re-establishing links between Afghan provinces and neighbouring countries.

The health services envisioned are:

- Inpatient and outpatient specialty care in medicine, surgery, obstetrics, gynaecology, paediatrics and psychiatry, as well as selected sub-specialties; offering minimal and micro-invasive surgery and, potentially, interventional radiology; and capable of serving as a regional referral centre;
- 24-hour emergency services;
- Comprehensive diagnostic services including a referral laboratory, state-of-the-art imaging (standard and specialised radiology, ultrasound, mammography, CT scan, MRI, nuclear medicine), neurophysiology, cardiopulmonary, physiotherapy and rehabilitation facilities and a pharmacy capable of in-house compounding;
- Resources to provide other selected technical and support services to provincial hospitals operated by AKDN (including through telemedicine);
- Relevant community and population-based research;

A professional and continuing education school using e-learning technologies is being explored.

La Chaine de l'Espoir

A humanitarian organisation founded in 1988 by Alain Deloche, La Chaine de l'Espoir is active in more than 20 countries, primarily in Asia, Africa and eastern Europe. It helps to address healthcare inequalities that affect the lives of infants and provides surgical care and education for disadvantaged children.

AKDN/ Ian MacWilliam

SIGNIFICANT MILESTONES

- ISO certification for quality management systems in its third year of operation.
- FMIC is the first hospital in Afghanistan to have performed open heart surgery; and closed heart surgeries using a local cardiac team without the assistance of any foreign surgeon.
- For the first time in Afghanistan surgery for oesophageal atresia – a disorder of the digestive system in which the oesophagus does not develop properly – was performed; the case was presented at the annual congress of the French Society of Pediatrics in Nantes in June 2008 and subsequently published in the *Archives de Pediatrie*.
- Independent diagnosis and treatment of sequential co-existence of oesophageal atresia and hypertrophic pyloric stenosis – a rare medical condition, which has been reported in medical literature in only a handful of instances.
- Performing for the first time in Afghanistan a radiological reduction of intussusception – where a small part of the small intestine re-treats into another section of the intestine – avoiding the need for complicated surgery.
- Independently treating congenital lobar emphysema – a respiratory disease that occurs in infants where air enters the lungs but cannot leave.

For further information:
French Medical Institute for Children, Aliabad Rd, Kabul, Afghanistan. Tel: +93 (0) 752 02 3912/3/4. Email: info@fmic.org.af