

A thousand splendid smiles in Afghanistan

Afghanistan, a country torn by the war and multiple conflicts, receives a lot of attention from the international community, and yet its people continue to face severe hardships that are little known to the rest of the world.

The major problem is access to professional medical aid, especially for children and babies. Some of the most essential and comparatively standard medical services enjoyed across the world – even in developing countries – are largely unavailable for the Afghan people, heart treatment and cardiac surgery among them.

With a heart-related medical condition, patients must undertake long, difficult and often dangerous trips across the borders to either Pakistan, India or Europe for surgery. This is not an option for children and adults from families with little income. In fact the majority of the population face the prospect of dying young, even due to a minor heart problem that might easily have been fixed with simple surgery. Anyone with an emergency condition would likely not survive. Until very recently, Afghanistan was a country where cardiac surgery as such did not even exist.

In 2009, Dr Najeebullah Bina came back



Dr Najeeb Bina, on the left, performs cardiac surgery in Kabul.

to Kabul after six years in France where he worked as a cardiac vascular surgeon in order to build his dream – the first Afghan cardiac surgery team and to help the people of his country to recover from the deadly conflicts. His vision was to specifically focus on helping to treat children with acute and complex heart problems and he now heads the cardiac paediatric surgery department at the French Medical Institute for Children (FMIC) in Kabul.

Dr Bina was working as chief resident and senior surgeon at Wazir Akbar Khan Teaching Hospital when, in 2004, he had the opportunity to continue his post-graduate medical education in France at Claude Bernard University in Lyon. He completed a doctoral degree for cardiovascular surgery and also for clinical and experimental microsurgery. He then worked as a fellow doctor of thoraco-cardiovascular and vascular surgery. Between 2007 and 2009 he was assistant professor on the cardio surgery ward at CHU Nord Hospital in St Etienne.

Dr Bina explains: “Going back to Kabul was always in my mind, as my goal was to learn all I could in France and bring this experience back to Afghanistan, where we had no teaching facilities to educate medical students in cardiac surgery. Cardiac surgery treatment for patients was not available as such in the whole country. While living in France, from 2006-2009 I was travelling for short-term missions with French non-governmental organisations and teams to conduct the first cardiac interventions for babies and young children in Kabul and Kandahar, where I could see the lack of medical care for children with heart conditions.

“So my ultimate hope was to bring all I could back to my country in terms of knowledge, experience and to build a cardiac surgery team in Kabul.”

Around 97 percent of all cardiac problems are not diagnosed during the first week of life in Afghanistan. The main challenge is still the war, as almost all births are in areas with very low levels of care in terms of medical staff and equipment.



A young patient waits for hospital admission.

Lack of parental education is also a negative factor since 80 percent of all deliveries are performed at home by traditional midwives. According to the United Nations Population Division (2010) the infant mortality rate is around 144 deaths per 1,000 live births which is among the highest in the world.

A very small percentage of babies needing surgery, about 5.5%, were being flown out of the country either by parents with enough money or by national and international NGOs to India, Pakistan, Germany or France. One centre was performing open and close heart surgery but only in the presence of French teams composed of a paediatric cardiac surgeon, cardiac anaesthetist, paediatric cardiologist, perfusionist, anaesthesia nurses, OT nurses, ICU nurses, inpatient ward nurses. French teams were visiting Kabul about five times each year, for two or three weeks at a time.

Now there are children coming to Dr Bina's ward from all over Afghanistan, and many from the refugees camps located very far away from the country.

In 2007, the FMIC had the first PICU in Afghanistan with a good variety of equipment including ventilators, cardiac monitors, ECGs, ultrasonography, portable X-ray machines and defibrillators. From January 2010 Dr Bina improvised in terms of specific items for cardiac surgery such as

external pacemakers, monitors, ventilators and some bedside blood exams for arterial blood gases and coagulation (i-STAT), to name a few.

The 15-bed ICU now has 42 trained nurses, four team leaders and two head nurses, all trained by long-term mission experts from France, Spain and Germany or outside of the country. The ICU is staffed also with five senior doctors and two junior doctors in training, one head of ward and one expat paediatrician from Germany.

The cardiac surgery department performed 298 cases of open and closed heart surgery in 2010 and 183 up to August 2011 all with local staff (one surgeon, two junior surgeons, one cardiologist, one anaesthetist, one perfusionist, two OT nurses, one anaesthesia nurse) as routine surgery. All types of cyanotic and acyanotic congenital heart diseases, adult congenital cardiopathies, aortic surgery and valve surgeries are handled. The mortality rate at the institute since heart surgery began is 3.2%. Last year this dropped to 2.7%, as the local Afghan team grew slowly but effectively in size and experience.

Afghanistan is a very traditional society and parents are present in the hospital all the time when their child is ill and during surgery. Visits during the post-operative period are allowed three times a day. Parents of patients with critical conditions can sometimes stay longer, even overnight.

While waiting room capacity and facilities to enable parents to stay are still quite limited, everything possible is done to give them this opportunity but it is a challenge due to the high volume of work, security situation and lack of room to accommodate them.

The day-to-day difficulties faced in Kabul are enormous in comparison to France or any other European country, says Dr Bina. "First of all, we are still facing an extremely difficult situation in terms of security with the hospital and doctors often a target for attacks, especially recently.

"Secondly, our team is still small and relatively inexperienced and the number of surgical cases we have to handle daily is often high. To be honest I have to stay in the hospital 24 hours a day, seven days a week to ensure the functioning of the ward. Lack of funding, lack of some facilities, difficulties with post-operational care and monitoring and many other problems make cardiac surgery in Kabul



Children and parents in the busy waiting room.

entirely unlike the situation in Europe. However, we are very happy we have started such a level of operations in Kabul to help our children here."

Dr Bina continued: "In order to rebuild a destroyed country, you have to build a country's people first and to build the people you need a healthy generation of kids. This July we marked 1,000 heart operations for children performed since the start of the ward. We call them our 'thousand splendid smiles.' Without our young Afghan cardiac surgery team and doctors supporting us, these kids would never have had a chance to live and the fact that we can do something to help keep these hearts beating motivates us and helps us to keep working, despite all the problems we face in Afghanistan. It gives us hope.

"My goal is to build a high level cardiac surgery centre for diagnosis and treatment of congenital heart disease in the pre-delivery and post labour period in the very near future, with a new generation of surgeons and staff in Kabul."

For the future, the lack of doctors needs addressing first. Two young cardiac students are currently in training, however teaching facilities are limited and the need for cardiac surgeons extremely high. Dr Bina plans to train more surgeons and attract more doctors to work in Kabul – not easy, but very important.

Additionally, the lack of funding in some cases is also a problem as parents have to cover a part of the cost of the operation,

with FMIC paying the major part. Even 20-30% of the surgery cost is an unbearable amount for poor families.

Under the umbrella and with the support of the Institute for Stability and Development based in Prague, a charity project 'Les Petits Coeurs' (Little Hearts) is being launched in October 2011. The funds raised will be used to help towards the cost of heart operations for children of very poor families.

And finally, Dr Bina says: "We also need to create a cardiac training centre on a national level for clinical and research purposes. This is more of a long-term goal for us which is very important in order for Afghanistan to be able to find a sustainable way to solve the level of medical issues for children, to build a more healthy generation, and for our country to start recovering itself."

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