

Healing hearts in paediatrics: an interview with Dr Adolphus Chau Dr Chau at the Children's Heart Foundation's annual Heart-to-Heart Charity Walk

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Dr Adolphus Kai-tung Chau's dedication to advancing paediatric cardiac interventions available in Hong Kong has been evident throughout his career. Dr Chau has served as a consultant at the Department of Paediatric Cardiology at Grantham Hospital and Queen Mary Hospital for 25 years, including 15 years as the Chief of Paediatric Cardiology. He has played a pivotal role in implementing new techniques at these hospitals. Dr Chau currently works closely as an interventional paediatric cardiologist with surgeons, anaesthesiologists, and allied healthcare professionals to ensure the best possible care for his patients. His time is also spent in research on longterm outcomes after interventional and surgical procedures and teaching and training younger generations of doctors, students, and nurses locally and abroad.

As Chief of Service, Dr Chau oversaw many regional firsts in paediatric cardiology in Hong Kong, including the establishment of the first extracorporeal membrane oxygenation (ECMO) programme. Among his many experiences, the introduction of mechanical circulatory support by ventricular assist device (VAD) for children is a bittersweet story that Dr Chau holds close to his heart. In 2001, an 11-yearold girl with dilated cardiomyopathy complicated by end-stage heart failure was placed under Dr Chau's care. Without a heart transplant, the girl would rapidly succumb to her illness. Up to that point, paediatric heart transplantation had never been successfully attempted before in Hong Kong. Moreover, the number of suitable donor hearts for children was very limited. In his determined search for a way to save the patient, Dr Chau became aware of the VAD which could prolong the patient's survival and act as a bridge to transplantation. The medical team identified a suitable device which had been developed at the German Heart Centre in Berlin, Germany. Unfortunately, the VAD was prohibitively expensive. Ultimately, in collaboration with the cardiothoracic surgeons, Hong Kong Heart Transplant team and with funding from the Children's Heart Foundation (CHF), the VAD machine was made available for temporary use to save the dying child. Dr Chau quietly recalls the tragic fatal stroke that the young patient subsequently suffered 2 weeks later, as a complication of VAD treatment. Despite his relentless perseverance, the child he had so desperately tried to save passed away.

However, his efforts were not futile, and Dr Chau saw the opportunity for advancement. This young patient had exposed the severe lack of lifesaving technology in Hong Kong needed by such children waiting for a heart transplant. A team of doctors, including Dr Chau, travelled to the German Heart Centre to learn more about VAD and afterwards established its use in Hong Kong. Dr Chau reflects that even though this was not a success story, this first experience was very useful in saving other children afterwards. In 2004, a paediatric patient who suffered from fulminant myocarditis survived through the use of the VAD. In 2009, Dr Chau collaborated with the Hong Kong Heart Transplant team and the Cardiothoracic Surgery Department at Queen Mary Hospital for the first paediatric heart transplant operation in Hong Kong.

Dr Chau is well-known for his successful career in Paediatric Cardiology, but he is particularly proud and enthusiastic for his work with the CHF, of which he is the current chairman. In 1994, Dr Chau cofounded the CHF with a group of concerned parents and colleagues, in order to support families with children suffering from congenital heart disease. Over the years, CHF has expanded to provide families with subsidies and psychosocial support to fill the gap between hospital clinical services and the personal needs of patients and their families. Now in its 25th year, the CHF has over 5000 members in Hong Kong and is an integral step in the care plan for patients with cardiac disease. As a registered charity, the CHF offers counselling services, peer support groups for parents, medical advice, and school talks on heart health. It also provides developmental rehabilitation for children with congenital heart diseases, whose medical condition often impacts negatively on their self-esteem.

The CHF is also concerned with heart health of the population at large. Recognising that heart diseases is a local top killer, the CHF has been actively disseminating information about heart health through public exhibitions, such as at shopping malls, and on its website. In addition, the CHF has



Dr Chau (right) during an interventional procedure



Dr Chau (third from left) was interviewed by the journal's student reporters (from left): Cherry, Caitlin and Natalie

conducted health talks in primary and secondary schools in the past decade to educate and advise children and teenagers on cardiovascular health. As Dr Chau remarked, "Heart health must start at early childhood."

Although the CHF was established as a patient support group, it has also proved to be an invaluable partner to Dr Chau and his colleagues in bringing cutting-edge technology to Hong Kong, such as the VAD. The organisation's all-encompassing approach and foresight is particularly evident in their current projects. A good example is the House of the Heart. Dr Chau understood that parents are an essential part of in-patient care for very young patients, and their reassuring presence is vital for a child's recovery. However, the frequent commute to and from the hospital can be taxing for parents who live far away, and cramped wards do not have the luxury of space for an extra bed for parents to sleep next to their sick child. Dr Chau brought his observations to the CHF and together a plan to provide convenient accommodation for the parents of in-patients at Grantham Hospital was shaped. Grantham Hospital offered a unit of senior staff quarters free of charge, which was then converted into the House of the Heart, a dormitory for parents during their child's in-patient care.

Always going the extra mile, Dr Chau also saw the House of the Heart as a space for parents to reach out to each other during difficult times. Inpatients are invariably the most acute cases, which also brings the greatest anxiety for parents. The House of the Heart was designed with a common area to encourage parents to socialise and support each other, and CHF also brought in counsellors to facilitate group meetings. When the department moved to Queen Mary Hospital in 2008, the CHF rented a government property next to the hospital as the new House of the Heart and expanded its services to include parents of paediatric oncology in-patients. Unfortunately, in 2016, the site was re-purposed to become the current University Pathology Building.

The CHF had to overcome significant obstacles to ultimately secure a new House of the Heart dormitory at Wah Fu Estate. Although the new location is further away from the hospital than the previous House of the Heart at Grantham, it remains very popular with consistently full occupancy rates.

Since the establishment of the Hong Kong Children's Hospital in Kowloon Bay in 2017, Dr Chau has been at the helm of transferring the Department of Paediatric Cardiology there, from Queen Mary Hospital. Setting up a new CHF service centre near the new Children's Hospital is another project that Dr Chau is spearheading, working tirelessly to overcome numerous hurdles along the way. The CHF has successfully negotiated an affordable deal for new premises in Kowloon Bay and is now working towards fundraising to continue its services for children and families.

In Dr Chau's many years of caring for some of the most vulnerable children in Hong Kong, his insight into his patient's needs beyond medical services alone has proven invaluable to families. Children with congenital heart disease encounter social and psychological challenges as a result of their physical problems that must be addressed. His experiences have impressed on him the importance of holistic medicine—not only to repair anatomical defects, but to truly *heal* hearts—which is a core value for the CHF. Thus, Dr Chau considers his clinical work and community services to be inseparable from each other.

For the next generation of doctors, Dr Chau advises perseverance through the inevitable career ups and downs and adherence to the belief that knowledge can help patients. He also stresses that effective communication and collaboration with other doctors, nurses, and allied health professionals is essential for delivering the best care that patients deserve. He ends the interview with a quote from Pat Patrick: *"In life, we leave a legacy to our children, we leave our footprints wherever we travel, and we leave our fingerprints on every heart we touch."*