

"Our biggest achievement over the last decade is the development of sub-specialised clinics. We used to offer general paediatric cardiology services, but since we started PCHC, we are now able to streamline our sub-specialised clinics based on individual expertise and offer more efficient and advanced services."

Dr Marhisham Che Mood

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Serving at PCHC since it started 10 years ago, Dr Marhisham is the Head of Paediatric and Congenital Heart Centre (PCHC) and a long-time Consultant Paediatric Cardiologist. He specialises in paediatric cardiology and paediatric cardiac intervention.

PCHC'S DEVELOPMENTS

"Our clinical outpatient service has undergone a major change since our inception in 2012. When PCHC first opened, there were only three clinics: General Paediatric Cardiology Clinic, Adult CHD Clinic and Pacemaker & Arrhythmia Clinic. However, over the last ten years, these clinics have evolved into more subspecialised clinics. For example, while we still have a General Paediatric Cardiology Clinic, the Adult CHD Clinic has evolved into a Pulmonary Hypertension Clinic, Cardio-Genetic Clinic and Cardio-Obstetric Clinics. Back then, we only had 1 Arrhythmia and Pacemaker Clinic, we now have 2 of these clinics.

Furthermore, there is a speciality clinic dedicated to treat the rare cardiac condition called Pulmonary Atresia Intact Ventricular Septum (PAIVS). Even though it is a rare disease in the world, the number is visibly high in Malaysia where PCHC serves as the biggest referral centre for this condition. Indeed, our specialised team of PCHC doctors serves as key opinion leaders and manage this specific group of patients.

Meanwhile, our clinical inpatient services consist of diagnostic and interventional procedures. The diagnostic procedure refers to specialised investigation methods such as cardiac CT scans and cardiac MRIs. Additionally, we have a special facility called Non-Invasive Cardiac laboratory (NCL) where we run diagnostic tests to detect abnormalities in the heart rhythm. These tests include but are not limited to Electrocardiography (ECG), Pacemaker check-ups, Exercise Stress Test and Holter Monitor check-ups.

We do offer paediatric catheter procedures and cardiac surgeries for a wide range of heart diseases. Paediatric catheter procedure can be used both as a diagnostic and an interventional tool, meaning that not only can it be used to detect heart diseases, but it can also be used to treat them. At our centre, these two fields - cathether procedure and cardiac surgeries - are the highest in demand. For example, we perform about 900 cases per year for transcatheter procedures and approximately 1200 cases per year for CHD surgery.

However, it is important to note that quantifying our services is quite tough as they are all very interrelated. To put it into perspective, a patient needs to first undergo diagnostic procedures such as a cardiac CT or an MRI scan and at times, a catheter procedure before eventually undergoing cardiac surgery. So, an entire team is needed to treat a single patient. It is always a team effort.

Another service we offer is the training of paediatric doctors. So far, we have trained about 88 specialists

from around the world, the majority of which hail from South East Asian countries such as Vietnam, Indonesia and Myanmar. We have also trained those from Middle East as well as from Africa and Europe, mainly the UK. With the development of sub-specialised clinics over the last ten years, our training programmes for these doctors have also become more specialized and progressed in terms of extensiveness. Indeed, PCHC offers one of the most advanced ICU training in Southeast Asia.

OVERVIEW OF PCHC'S CLINICAL SERVICES

Outpatient Services

- · PCHC has 6 general paediatric cardiology clinics AND
- · 7 sub-specialised clinics for CHD:
 - Adult CHD
 - Pacemaker & Arrhythmia
 - Pulmonary Hypertension
 - Foetal Cardiac Services
 - Heart Disease in Pregnancy
 - Marfan and Aortopathy
 - Pulmonary Atresia Intact Ventricular Septum (PAIVS)

NCL (Non-Invasive Cardiology Laboratory) is designed to consolidate expertise in diagnostic investigations including technologies such as Echocardiography (2D & 3D), Electrocardiography (ECG or EKG), Pacemaker Check-ups, Exercise Stress Test (EST), Holter Monitor, and Cardiopulmonary Exercise Test.

Inpatient Services:

Diagnostic Investigations

- Paediatric Catheter Procedures
- Haemodynamic Assessment and Echocardiogram
- Cardiac CT scans and cardiac MRIs
- Non-invasive Cardiac Laboratory (NCL) including transesophageal echocardiography

Interventional Procedures

- Paediatric Catheter Procedures (~900 cases per year)
- Wide range of congenital cardiac surgeries for heart disease
 - Simple and complex CHD surgery (~1200 surgeries per year)

