

# Remembering the 'Dream Team'

**F**ORTY years ago, on June 28, 1981, a team of eight from Malaysia arrived in Sydney, Australia. They were on a mission. They were going to be the skeletal pioneering team to kick-start the country's first standalone, dedicated open-heart surgical programme in the country at Hospital Kuala Lumpur (HKL). They all had one thing in common: NONE of them had seen or been involved in open-heart surgery before. And they were required to get up to speed and start the service by early 1982.

In retrospect, by any standard, the project did move quickly. It started with a chance meeting I had a year earlier, whilst on a short holiday in Malaysia in June 1980, with our distinguished consultant cardiologist, the late Datuk Dr Nik Zainal, at HKL. Over the next few days, we met the then deputy health minister, the late Datuk Amar Dr Sulaiman Daud, and the Health Ministry then director of planning & development Datuk Dr Khalid Sahan.

The subject of the meetings was the establishment of a cardiac surgical service at HKL. With numerous public appeals for funds to sponsor patients for cardiac surgery abroad, the ministry was under pressure to explain the lack of local cardiac surgical facilities.

There'd been attempts at setting up a cardiac surgical service at HKL before. It was explained that the reason for stalling was the lack of coherence and coordination in planning and implementation, especially with respect to team training.

It was a dream team — in temperament and competency — united by a singularity of purpose, reminisces **Datuk Dr Rozali Wathooth**, one of Malaysia's pioneering cardiothoracic surgeons

We discussed that the most effective way of securing a safe team "from scratch", with a short runway, was to train a core team by total immersion and technology transfer; having key members train at the same place and same time, and getting them to adopt the same protocols and technologies as the parent institutions.

Formal high-level negotiations between the ministry and the University of Sydney Teaching Hospitals began in November 1980. Following confirmation, a diverse team was assembled from around the country.

Senior-most of the eight-member team was a consultant anaesthetist from HKL. Another doctor member was a medical officer from Bukit Mertajam Hospital. Three were staff nurses, two of them from HKL and another from Langkawi Hospital. One trained as a theatre nurse and the other two as intensive care (ICU) nurses.

Two hospital assistants were brought in from Kota Bharu General Hospital to be trained as perfusionists or "pump technicians", earmarked to run the heart-lung machine during open-heart surgery. Another was a laboratory technician based at HKL.

When the team arrived, I was in my

penultimate year of undergoing a self-sponsored structured six-year Australasian fellowship cardiothoracic surgical training programme at the University of Sydney Teaching Hospitals.

I'd not known a single one of them before they landed in Sydney, except for the consultant anaesthetist Datuk Dr S. Radha Krishna, whom I met briefly during meetings in February 1981 in Kuala Lumpur. The rest of the team members were hand-picked by Dr Nik Zainal and Dr Radha Krishna. All but two were married with children and they left their respective families behind.

## THE JOURNEY BEGINS

The five male members of the team were accommodated at a Royal Prince Alfred Hospital (RPAH) staff flat in the same block where my family and I were living since 1978. The three nurses stayed at the hospital's Nurses Quarters nearby. Our journey as a team began almost immediately.

On weekdays, each member was taught and coached by our Australian mentors initially at RPAH for adult cardiothoracic surgery and later, at the Royal Alexandra Hospital for Children for paediatric cardiac surgery.

Most weekends, whenever I was not on-call, we'd meet at my apartment and we'd go over the materials learnt during the week.

These sessions were particularly crucial for the two hospital assistants training to be our future perfusionists, for they had to deal with subjects and techniques totally alien to them until then. The gravity of their make-or-break role in the safe conduct of open-heart surgery sank in very quickly. We also spent time identifying and discussing the equipment and other requirements we'd need back home when we finally returned.

Although the team was essentially unknown to me prior to their arrival in Sydney, it was fortunately a "dream team" — in temperament and competency — united by a singular purpose.

They were dedicated, smart and extremely reliable. As the training progressed into the latter parts of 1981, a typical scenario would emerge wherein I'd be operating, assisted by our surgical registrar Dr Abdollah Salleh, with Dr Radha Krishna as the anaesthetist, staff nurse Daphne Ho as the scrub nurse, and Azmi Fadzil or Aw Heng Tao as the perfusionist or pump technician.



**ABOVE:** A Thank You and Farewell Lunch for Dr Bruce Leckie and Dr F.B. Clarke in 1982 after spending a month with the team.

**RIGHT:** A photo of the dream team.



During surgery, the Australian surgeons and anaesthetists would often gravitate more and more towards the staff tea room — as a gesture of lengthening the umbilical cord rather than them actually requiring refreshments.

When the patient was transferred to the Intensive Care Unit, our own staff nurses Linda Low Yoke Heng and Irene Khoo provided the post-operative care under supervision [We also had Malaysian ICU staff nurse Asadah Sidon already working at RPAH for some time. Although not sponsored by the Health Ministry, we managed to persuade her to work with us and return to Malaysia subsequently to be part of our team in 1982]. Our laboratory technician Mansor Maidin would be conducting biochemical and physiological tests on the patients during and after surgery.

**ON HOME GROUND**

The entire team was back in Malaysia by Feb 20, 1982. We had barely five weeks to get our act together, with a total approved budget of RM3.6 million, before the first scheduled operations.

On March 30, 1982, Dr Bruce Leckie and Dr F.B. Clarke, senior consultant cardiothoracic surgeon and senior consultant anaesthetist, respectively, from RPAH arrived in Kuala Lumpur to help us start the programme.

Both stayed for a whole month with only their airfares as well as food and lodging covered by the Malaysian government. They declined any salary or compensation for lost income for their Malaysian stay.

The first open-heart surgery was performed on schedule on April 6, 1982. The team successfully performed a closure of hole-in-heart operation on a 19-year-old M. Maheswaran from Penang.

That first week, the team performed three open-heart and four closed-heart surgeries uneventfully. The programme took off and the team, dubbed by one newspaper as "the team that was built in eight months", never looked back. As part of capacity building, additional staff was provided by the

hospital, with the original team as the nucleus.

**NO MEAN FEAT**

On Feb 1, 1982, during a press conference prior to the return of the entire team, Dr Nik Zainal had announced: "We hope (the team would be able) to perform 50 operations between April and December this year, and double or triple that figure the following year."

Between April 6, 1982 and Dec 31, 1982 (approximately nine months), the team performed a total of 232 operations. Out of these, 127 were open-heart surgeries for congenital and acquired cardiac conditions (with one or 0.79 per cent hospital mortality).

The remaining 105 were general thoracic (lung and non-heart related), closed-heart and vascular (blood vessel) surgeries, with no mortality. In the then-2,600-bed HKL, we were allocated one operating theatre, four ICU beds (often expanded to six functional ones) and a shared 32-bed general ward.

On Oct 22, 1982, just over six months after commencement of service, the team successfully performed the country's first coronary artery bypass surgery — a quintuple bypass on Ibrahim Hj Bakar, a 39-year-old treasury staff.

A senior physician at the hospital accused us the next day of "opening Pandora's box" for starting coronary artery bypass surgery locally. He was partly instrumental, until then, of recommending senior government officials overseas for such operations.

Today, this is undoubtedly the most common open-heart surgical procedure performed in the country at much reduced cost compared to those done overseas, with very comparable results, allowing many more patients to live longer and lead productive lives.

By December 1982, the team expanded to comprise one [our original] surgical registrar, four medical officers, three theatre nurses, 18 intensive care staff nurses, 13 general ward staff nurses, two anaesthetists and three perfusionists.

**OPEN HEART SURGERY TO COST \$3,000 NOW**

**THE NEW RATES AT A GLANCE**

CLASS	PER DAY	PER WEEK	PER MONTH
ICU	\$1,200	\$8,400	\$25,200
General Ward	\$200	\$1,400	\$4,200
Operating Theatre	\$500	\$3,500	\$10,500
Perfusionist	\$100	\$700	\$2,100
ICU Nurse	\$100	\$700	\$2,100
General Ward Nurse	\$50	\$350	\$1,050
Operating Theatre Nurse	\$100	\$700	\$2,100
Perfusionist	\$100	\$700	\$2,100
ICU Nurse	\$100	\$700	\$2,100
General Ward Nurse	\$50	\$350	\$1,050
Operating Theatre Nurse	\$100	\$700	\$2,100
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General Ward Nurse	\$50	\$350	\$1,050
Operating Theatre Nurse	\$100	\$700	\$2,100
Perfusionist	\$100	\$700	\$2,100

The following year, between Jan 1 and Dec 31, 1983, the team performed 419 operations. Of these, 181 were open-heart surgeries, with three peri-operative mortalities (1.66 per cent), largely related to the team taking on patients with more advanced or complex diseases.

Among the open-heart operations were also surgeries performed on children with congenital heart conditions under "suspended animation", or utilising a technique referred to as total circulatory arrest. The remaining 238 operations for 1983 were general thoracic, closed-heart and vascular surgeries, with no surgery-related mortality.

As the unit was able to clear more cases, the number of patients on the waiting list reduced temporarily until demand for surgical services outstripped our capacity due to increasing nationwide referrals, including of patients from Sabah and Sarawak. The number of patients referred for surgery abroad, however, declined significantly. Public pressure on the government and the ministry appeared to have eased.

In December 1983, the team welcomed an additional cardiothoracic surgeon, [now Tan Sri] Dr Yahya Awang, upon completion of his training in London. There were,



**CLOCKWISE:** As we had only one shared third class ward, all patients then were charged at third class rates; This girl, who had closure of hole-in-heart operation, would be in her mid-40s now; The team's proud tag.

however, no changes in the available physical facilities.

More disheartening was the decision that the proposed new Cardiothoracic Centre Project that the team had been looking forward to, approved in 1981 under the Fourth Malaysia Plan (1981-1985) and scheduled "to be functional in 1987/88" was scrapped, with very little chance of being included in the mid-term review or re-introduced under the Fifth Malaysia Plan.

**CHANGES IN THE TEAM**

Inevitably, after several years and for various reasons, there were changes in the team. Dr Radha Krishna retired from HKL in December 1992. He practised initially at Pantai Medical Centre, Kuala Lumpur, before moving to Subang Jaya Medical Centre (SJMC) two years later. Sadly, he passed away after a long illness in 2012.

Dr Abdollah, our "original" surgical registrar, didn't pursue cardiothoracic surgery but qualified as a general surgeon and retired from Selayang Hospital in 2011. He had a hand in establishing the Malaysian Society for Quality in Health, and also served as a hospital accreditation surveyor with the organisation.

Following his retirement, he was in consultancy pertaining to information management in health care services. He also taught undergraduate and postgraduate students at several local universities.

Perfusionist Azmi and theatre staff nurse Ho joined me at SJMC to start the first private open-heart surgical service in the country in 1985. Azmi retired in 2019. Ho is still working part-time at SJMC. Khoo went back to Kedah after several years at HKL. She also spent sometime working in the Middle East. Mansor continued to work at HKL until his retirement.

The HKL cardiothoracic department closed down and it, together with the cardiology and cardiothoracic anaesthesia departments, moved their services to the newly-commissioned National Heart Institute (IJN) in August 1992, constructed after the then prime minister Tun Dr Mahathir Mohamed had undergone his coronary artery bypass surgery at HKL in 1989.

TURN TO PAGE 20

*The Malaysian team hosted a Thank You and Farewell Garden Party for the staff of RPAH and RAHC and their families before we returned.*



# An inspiration to others

FROM PAGE 19

Aw continued as senior perfusionist at IJN until 2004, when he joined Dr Yahya to start the open-heart service at KPJ Damansara Specialist Hospital. He finally retired in 2017. Low was promoted to sister-in-charge of the Cardiothoracic Intensive Care Unit at HKL before moving to IJN as ICU Nurse manager.

Following a short stint as acting matron, she retired from IJN in 2000, and joined Gleneagles Hospital Kuala Lumpur as nurse educator until 2006. Asadah returned to Australia, settled in Perth and worked as staff development educator with the Department of Health, Western Australia.

A special tribute is due to a dear friend and very special colleague — the late Dr Radha Krishna. Anaesthetists are often overlooked and are insufficiently recognised for their contribution to the success of any surgical programme.

Dr Radha Krishna was a brilliant anaesthetist with excellent technical skills. He was instrumental in training and overseeing our perfusionists as well as other supporting staff, enabling them to perform at levels of safety comparable to among the best in their fields. He was also instrumental in attracting many competent and hardworking anaesthetists to take up the practice of cardiac anaesthesiology.

Most of all, I appreciated his friendship, work ethics, compassion and dedication to his work and patients.

I remember many occasions when I called upon him to come in to the hospital at ungodly hours of the night when our patients were in need of urgent help.

Not once did he ask "why" or "what for". His response was always: "I'll be there in a few minutes". I also cherish the memory of having him awake by my side through many nights when we were nursing unstable patients together in the ICU after surgery.

## PROUD TESTIMONIALS

The team was eternally grateful to our Australian mentors and friends for their untiring support and invaluable guidance throughout [my and] our team's stay with them in Sydney. They were deeply invested in the Malaysian team, culminating with Dr Leckie and Dr Clarke spending a full month during our inauguration of service.



Letter from the Deputy Prime Minister after the team performed the first coronary artery bypass surgery in the country.

Special tribute to our deceased mentors, colleagues and friends:

### Late Professor

**Dr Douglas K. Baird**

— deceased Nov 16, 1995

**Late Datuk Dr Nik Zainal**

— deceased Oct 29, 2007

**Late Datuk**

**Dr S. Radha Krishna**

— deceased March 17, 2012

**Late Dr Bruce D. Leckie**

— deceased May 21, 2012

**Late Tan Sri Dr Khalid Sahan,**

former director-general,

Health Ministry

— deceased Feb 24, 2021

They, together with many other living individuals in Australia and Malaysia, placed their hearts and souls in the establishment of the cardiothoracic and vascular surgical services at HKL.

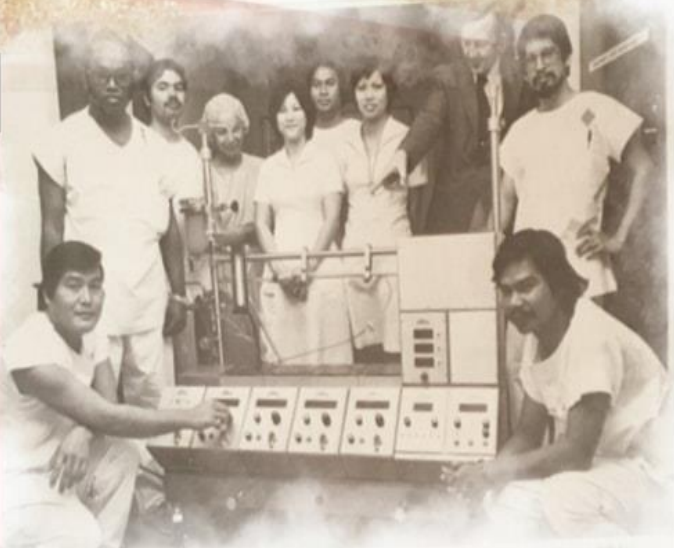
During a press interview on April 26, 1982, a few days before his departure to Sydney, Dr Leckie summed up his impressions, saying: "We're extremely proud of the way they're performing here and with the way they've established the unit. It was very far sighted in the first place to send them down (to Sydney). The essential thing about cardiac surgery is team work."

Upon his return, he reported his involvement and experience with our team to the entire Department of Cardiothoracic Surgery at RPAH. In a letter dated May 28, 1982, Prof Dr Douglas K. Baird, the head of department, wrote: "I must first say how delighted I am to have heard Bruce's detailed descriptions of how successful everything is turning out for you in Kuala Lumpur. I'm absolutely delighted and terribly proud to have been part of helping you establish what's clearly going to be the first successful long-term open-heart surgery programme in Malaysia."

Their interest in our progress continued. In October 1983, Dr Clifford F. Hughes, senior consultant cardiothoracic surgeon, RPAH, paid our unit a follow-up visit. Upon his return, in a letter dated Nov 4, 1983, he wrote: "You've no idea how impressed I was with the programme that you've set up and the potential implications that it will have upon your country in the future years."



The Farewell and Thank You Lunch held at the flats' compound where my family and the male team members stayed.



With Dr A.F. Grant, former head of department of cardiothoracic surgery, and the heart-lung machine purchase by the Malaysian government. It was delivered to Sydney for the team to get used to it.

I've taken the liberty to write to our medical administration here and also to show them your excellent results. I didn't see any results that were anywhere near as good as yours anywhere else during my travels. The programme that you and the team have established in KL is I believe the first of many such programmes which will demonstrate the true value of a combined teaching programme and international co-operation. Please pass on to the team my congratulations for a job well done."

In 1985, internationally-renowned cardiac surgeon Sir Brian Barratt-Boyes, from Green Lane Hospital, New Zealand, also visited our unit. And in a letter dated Feb 4, 1985, he wrote: "I must congratulate you on what you've achieved in your department and I look forward to future visits to your delightful country."

In his memoirs, *The Dance of Life* published in 1996, the late Dr Rowan Nicks, retired founding head of cardiothoracic surgery at RPAH, and a frequent visitor to Malaysia (especially the University Hospital, Kuala Lumpur), wrote of our HKL unit:

"The brilliant idea of delivering the heart-lung machine and all the essential equipment to Royal Prince Alfred Hospital, Sydney, and transplanting the whole surgical team there to work with the Australians and employ its own special equipment was the product of discussions between the

Malaysians and the Australians.

After a year [sic] of training, the surgical unit returned to Kuala Lumpur, set itself up and commenced operating in 1982. The unit was immediately successful. The service and surgical results were so impressive from the beginning that the highest people in Malaysia entrusted themselves and their families to the national unit instead of going abroad for medical assessment and cardiac surgery as they'd commonly done in the past."

In cardiac surgery, interdependence is embraced over independence and no single person is the most important. Everyone's important and everyone has to be competent and responsible in his/her own domain of responsibility to ensure an optimal outcome. It's an operation performed by a "team" and only superior teams deliver superior results. We were lucky and blessed to have started with such a team.

The team must have inspired others. From that humble beginning, many clinicians, nurses and allied supporting staff have gone on to develop many other open-heart programmes throughout the country. Forty years on and with so many established cardiac surgical centres spread across the nation, there's no need to "start from scratch" in cardiac surgery ever again.