Modern era of general hospitals in Saudi Arabia started mid 1950’s

Central Hospitals in big cities and small hospitals in peripheral cities.

Mohammad R. Alfagih
The Central Hospital of Riyadh (Shemaisi) was opened November 1956 and remains a general hospital with no sub specialties until recently. Now called King Saudi Medical City with many sub specialties.
1973, I was Resident to the late Dr. Abdulrahman Fahmy in Shemaisi hospital. Dr. Fahmy performed close mitral valvotomy for mitral stenosis based on clinical diagnosis only, there was no echocardiography and no catheter laboratory.

Mohammad R. Alfagih
Until 1975 Shemaisi hospital in Riyadh was the major referral hospital for the Kingdom of Saudi Arabia.

Mohammad R. Alfagih
KING SAUD HOSPITAL
RIYADH CENTRAL HOSPITAL
King Saud Medical City
(Shemaisi)
1975 King Faisal Specialist Hospital & Research Center opened as the first modern hospital with many medical and surgical sub specialties.
Within few years after 1975 onward Saudi Arabia introduced advanced medical and surgical specialties. Many became Centers of Excellence in Cardiac Services.

Mohammad R. Alfagih
Opening of Riyadh Military Hospital
November 1978
Mid 1976 a team from Loma Linda University visited Khamis Mushait Military Hospital (south of Saudia Arabia) they performed what was the first open heart surgery in the Kingdom and remained there for one month.
The Loma Linda University visiting team

Khamis Mushait Military Hospital 1976
Mid 1978 King Faisal Specialist Hospital started Cardiac Surgery with a team from Baylor University rotating every few months.
Members from Baylor team

Dr. Zuhair Alhalees
The first 2 cases performed at KFSH-RC Riyadh by late Dr. Michael De Bakey were pulmonary valvotomy and ASD closure.
April 1979  I performed the first case of cardiac surgery starting our program in the Military Hospital in Riyadh, complementing our team with members from Loma Linda University team which was visiting Khamis Mushait Military Hospital at that time.

Mohammad R. Alfagih
August 1982 we started the first specialized program of Neonatal & Pediatric cardiac surgery in the Kingdom. After 2 years of preparing a team of Pediatric cardiologist, Anesthesiologist & nurses.

Mohammad R. Alfagih
This created the need for quick transport of neonates and infants to our center from different areas of Saudi Arabia. Because of long distances the only method was air transport.
After preparing the local team, I performed the first heart transplant in February 1986 at the Military Hospital in Riyadh. The recipient was a two years old girl and the donor was 9 months old boy.
RIYADH, March 16 — Saudi Arabia’s first baby heart transplant patient is doing well at the Riyadh Armed Forces Hospital, according to the surgeon who performed the operation, Dr. Muhammad Fagih.

The baby, a 10-month-old, had been in need of a transplant due to a failing heart. Dr. Fagih said that the baby was now doing well and that the team was pleased with the outcome of the operation.

Dr. Fagih also spoke about the importance of organ donation and the need for more awareness about the process. He emphasized the importance of having a well-developed system for organ donation in the country.

The Riyadh Armed Forces Hospital heart team, which performed the operation, was led by Dr. Fagih. The team worked closely with the laboratory for tissue matching and infection control, as well as with the patients’ families to ensure a smooth recovery.

Dr. Fagih also spoke about the care provided to the patient, which included monitoring of vital signs and careful management of the patient’s body’s immunosuppression system. He said that the patient was now showing good signs of recovery.

The baby’s transplant is a significant milestone in Saudi Arabia’s medical history and is expected to set a precedent for similar operations in the future.
Discharging the baby heart transplant
1986 we were the first to start the artificial heart and left ventricle assist device program to support the transplant program. Jarvic7 total artificial and Thoratec & BioMedicus LVADs.

Mohammad R. Alfagih
After successes achieved in cardiac surgery, dignitaries from inside The Kingdom and outside start to come to have their cardiac surgery in Saudi Arabia.
To keep ourselves in the forefront globally we established contact with the leaders in the field of adult and pediatric cardiac surgery and the experts in the related diagnostic modalities.

Mohammad R. Alfagih
Dr. Jameel Tajik
Kyoto, Japan
Profound hypothermia with circulatory arrest technique
Prince Sultan Cardiac Center Opened 1996
The first independent Cardiac Center in Saudi Arabia ordered to be build by Prince Sultan.
Dr. Howaida Al Qethamy
The first Saudi lady cardiac surgeon trained locally and became the head of cardiac surgery department

Mohammad R. Alfagih
Nowadays there are cardiac surgical centers in most areas of Saudi Arabia providing high quality cardiac services performing more than 4000 cardiac surgical operations yearly.
What can we learn from the experience?
1) Good surgical results is the most important factor to gain patient confidence, attract volume, perform research & training
2) Cardiac surgical service is very expensive to operate,

a) There should be a master plan for the Kingdom based on the need in each region.

b) A proper communication and transportation to ensure networking of cardiac services, economize on cost and improve quality complementing each other.

Mohammad R. Alfagih
3) Cardiac surgical services are highly dependent on teamwork of doctors, technicians, nurses etc., so each unit should have its own plans of training to have the needed human resources.
4) **Cardiac units should activate research in clinical, basic and organizational matters, to advance the specialty in the kingdom and to be part of the international endeavor in advancing cardiac care.**

Mohammad R. Alfagih
5) **Saudi Heart Association** should publish a monthly bulletin to include a number of KPI’s for each cardiac surgical unit in the Kingdom, at least number and type of operations, results, staffing and facilities.
Thank You

Mohammad R. Alfagih