CARDIAC SURGERY IN GHANA
HOW FAR?

DR. LAWRENCE A. SEREBOE
NATIONAL CARDIOTHORACIC CENTRE
KORLE-BU TEACHING HOSPITAL, ACCRA
“Any surgeon who dared to operate on the heart would lose the respect of his fellow surgeons.”

Christian Albert Theodor Billroth 1881
“Surgery of the heart has probably reached the limits set by nature to all surgery; no new method and no new discovery can overcome the natural difficulties that attend a wound of the heart.”

Stephen Paget 1896
CARDIAC SURGERY IN GHANA

• Robert Gross credited with PDA closure in 1939
• Gibbon credited with development of the pump oxygenator. Closed ASD with pump in 1953
CARDIAC SURGERY IN GHANA

• First open heart surgery in Ghana performed by Prof. C.O. Easmon in 1964 using the technique of surface cooling
CARDIAC SURGERY IN GHANA

• Other notable surgeons performed some closed heart surgeries:
  Dr. Bannerjee and Dr. Mendes- late 1960s
  Prof. E.D. Yeboah- early 1970s
  Prof. Lade Wosornu- 1972-1975
  Dr. Seth Bekoe 1975-1980
  Dr. M. P. Seth Williams- late 1980s
CARDIAC SURGERY IN GHANA

- Present era of cardiac surgery started in January 1989 with the return home from Germany of Prof. Kwabena Frimpong-Boateng
- Discussions and planning on setting up a Cardiothoracic Centre initiated in 1981
- Formal commissioning of a dedicated Cardiothoracic Centre was on April 16th, 1992 by Chairman of the ruling PNDC, Flt Lt. Jerry John Rawlings
Commissioning of the Centre
CARDIAC SURGERY IN GHANA

• First open heart surgery in Ghana with cardiopulmonary bypass (mitral valve replacement) performed on January 29th 1992

• Team led by Prof. K. Frimpong-Boateng, perfusionists, theatre and intensive care nurses had prior training at Hannover
NUCLEUS OF NCTC IN GERMANY
CARDIAC SURGERY IN GHANA

• Cardiothoracic Unit subsequently renamed National Cardiothoracic Centre
• High level of care necessary for cardiac surgery and intensive care facilities has made available improved levels of care for critically ill patients
• The NCTC has become a referral Centre for patients of several diplomatic missions and international organizations
CARDIAC SURGERY IN GHANA

- The NCTC has been recognized as Centre of Excellence by the West African College of Surgeons and accredited for the training of Cardiothoracic surgeons

- Has become the nerve centre for the post basic training in critical care and peri-operative nursing programmes of the Ministry of Health
CARDIAC SURGERY IN GHANA EMERGING CENTRES: KATH

• In the process of developing a cardiothoracic service. Vision is to establish a viable Centre in 2-3yrs

• Two visiting international groups presently offering some service from 2007

• Group from Boston Children’s Hospital led by. Dr. Francis Fynn-Thompson

• Adult cardiac surgery provided by Cardiostart International led by Dr. Marath Aubyn
CARDIAC SURGERY IN GHANA 37 MILTARY HOSPITAL

• Attempts at initiating a cardiac surgery programme ongoing

• Experimented with open heart surgery three years ago with two surgeries
CARDIAC SURGERY IN GHANA SPECTRUM

- TOF: 32%
- ASD: 14%
- PDA: 31%
- VSD: 23%
Adult Surgeries

- Valves: 34%
- CABG: 4%
- PM: 4%
- Aneurysms: 5%
- Pericardectomy: 5%
- Others: 3%
- Others: 49%
CARDIAC SURGERY IN GHANA
FUNDING OF CARDIAC SURGERY

• Beyond the reach of the average or more than average Ghanaian
• Individuals/Families
• Various companies e.g. COBOD, NEWMONT
• Organizations: Armed forces, Police, Prisons Service
CARDIAC SURGERY IN GHANA FUNDING

• Religious groups: Churches, mosques
• Media: Television, radio stations, print media-graphic needy fund.
• Benevolent individuals
• Private Health Insurance
CARDIAC SURGERY IN GHANA
FUNDING

• Ghana Heart Foundation was established in 1989
• Objective was to advance the knowledge of cardiovascular health among Ghanaians
• Subsequently set up a fund to aid Ghanaians to access heart surgery
• Funds managed by a Board of Trustees comprised of four eminent Ghanaians
• Generally contributes 50% of cost of surgery
CARDIAC SURGERY IN GHANA
FUNDING

- Children’s Heart Foundation, initially known as Golden Heart Trust
- Given financial assistance to several children for heart surgery
- Compassion International Ghana
- Some private health insurance schemes
- NHIS???
CARDIAC SURGERY IN GHANA

FUTURE

• Repair of complex congenital
• Minimally invasive approaches to mitral valve repair/replacement via port access surgery
• Develop off-pump CABG, MIDCAB
• Surgery for arrhythmias
• Further develop VATS
• Transplantation
CARDIAC SURGERY IN GHANA
SOME CHALLENGES

• Single active National Cardiothoracic Centre at Korle-Bu
• NCTC congested, larger facility required
• Construction of new University of Ghana Teaching Hospital commenced
• Proposed 200 bed Ghana Heart Centre will be sited there,
• Need to support take off of Centres at KATH, Kumasi, Tamale???
CARDIAC SURGERY IN GHANA MANPOWER DEVELOPMENT

• Training of cardiologists and cardiac surgeons:
  - University of Munster, Germany
  - Free University of Brussels, Belgium
  - Onze Lieve Vrouw Clinic, Belgium
  - Walter Sisulu Paediatric Heart Centre at Sunninghill Hospital, Johannesburg, South Africa
  - German Heart Centre, Munich, Germany
  - Denmark
  - Madras Medical Mission, Chennai-India
  - Texas Heart Institute