# Questions & Answers For Major Diseases Under Cardiology.docx

## 1. Research Documentation

### Sources Used

* PubMed - https://pubmed.ncbi.nlm.nih.gov/
* Mayo Clinic - https://www.mayoclinic.org/
* Johns Hopkins Medicine - https://www.hopkinsmedicine.org/
* World Health Organization (WHO) - https://www.who.int/
* American Heart Association (AHA) - https://www.heart.org/
* American College of Cardiology (ACC) - https://www.acc.org/
* Nigerian Cardiac Society - https://nigeriancardiacsociety.org/
* Nigerian Hypertension Society - https://pubmed.ncbi.nlm.nih.gov/
* Cleveland Clinic - https://www.clevelandclinic.org/
* Harvard Health - https://www.health.harvard.edu/
* Healthline Media - https://www.healthline.com/
* NHS (UK) - https://www.nhs.uk/
* Brigham and Women’s Hospital - https://www.brighamandwomens.org/
* Emory Brain Health Center - https://www.emoryhealthcare.org/centers-programs/brain-health-center/
* Baptist Health - https://www.baptisthealth.com/
* MedPark Hospital - https://www.medparkhospital.com/en/
* Victor Chang Cardiac Research Institute - https://www.victorchang.edu.au/
* Children’s Heart Foundation - https://www.childrensheartfoundation.org/

### Methodology

* **Search Terms**:
  + “Coronary artery disease diagnosis and treatment 2020+”
  + “Heart failure management guidelines”
  + “Atrial fibrillation epidemiology and therapy”
  + “Aortic stenosis diagnostic criteria”
  + “Hypertensive heart disease prevalence Nigeria”
  + “Infective endocarditis Duke criteria”
  + “Congenital heart disease screening challenges”
  + “Cerebrovascular disease stroke prevention”
  + “Peripheral artery disease treatment meta-analysis”
* **Filters Applied**:
  + Publication years: 2018–2025
  + Article types: Clinical guidelines, Systematic Reviews, Meta-analyses, Observational studies
  + Language: English
* **Validation**: Data was sourced from peer-reviewed journals, clinical guidelines, and reputable medical organizations. Cross-verification was performed using multiple sources to ensure accuracy and relevance, with a focus on Nigeria-specific data where available.

### Challenges Faced

* Limited access to full-text articles without institutional subscriptions, particularly for recent Nigerian studies.
* Scarcity of population-based data on cardiovascular diseases in Nigeria, with most studies being hospital-based, reducing generalizability.
* Underreporting of conditions like atrial fibrillation and atrial septal defects in rural Nigeria due to limited diagnostic tools (e.g., ECG, echocardiography).
* Variability in diagnostic access (e.g., coronary angiography, cardiac MRI) between high-income and low-resource settings like Nigeria.
* High prevalence of hypertension-driven heart failure in Nigeria complicates epidemiological estimates due to overlapping risk factors.
* Cultural and socioeconomic barriers in Nigeria (e.g., cost of procedures like PCI, low health literacy) impact treatment adherence and outcomes.
* Limited data on rare conditions like arrhythmogenic right ventricular dysplasia in African populations.
* Challenges in integrating global guidelines with local constraints, such as availability of TAVR or ICDs in Nigeria.

### Date Accessed

* April 15–June 9, 2025

### Description of Contents

* Comprehensive Q&A on diagnosis, symptoms, causes, treatment, and management of major cardiovascular diseases.
* Diseases covered include coronary artery disease, heart failure, atrial fibrillation, aortic stenosis, infective endocarditis, atrial septal defect, hypertensive heart disease, cardiomyopathy, pericardial disease, rheumatic fever, pulmonary heart disease, peripheral artery disease, and cerebrovascular disease.
* Diagnostic methods (e.g., ECG, echocardiography, coronary angiography, blood cultures) and their availability in Nigeria.
* Treatment options, including lifestyle modifications, medications (e.g., statins, ACE inhibitors, anticoagulants), and procedures (e.g., PCI, TAVR, catheter ablation, valve replacement).
* Patient-focused guidance on activity, diet, emergency signs, and managing comorbidities.
* Nigeria-specific considerations, such as high hypertension prevalence, limited access to advanced diagnostics (e.g., angiography, Holter monitoring), and the role of community-based screening.
* Preventive strategies, including smoking cessation, DASH/Mediterranean diets, and control of risk factors (e.g., blood pressure, cholesterol).
* References to global and Nigerian studies, with emphasis on regional challenges like rheumatic heart disease and HIV-associated endocarditis.

## 2. Disease List & Individual Contributions

### Diseases Covered

* **Coronary Artery Disease (CAD)**:
  + Includes atherosclerosis, angina, myocardial infarction.
* **Heart Failure (HF)**:
  + Subtypes: Heart failure with reduced ejection fraction (HFrEF), heart failure with preserved ejection fraction (HFpEF).
* **Arrhythmias**:
  + Atrial fibrillation (AFib), heart arrhythmia, arrhythmogenic right ventricular dysplasia (ARVD).
* **Valvular Heart Diseases**:
  + Aortic stenosis, tricuspid valve disease, rheumatic heart disease (RHD).
* **Infective Endocarditis (IE)**:
  + Includes bacterial and fungal causes, HIV-associated IE.
* **Congenital Heart Diseases (CHD)**:
  + Atrial septal defect (ASD), tetralogy of Fallot, single ventricle defects, other septal and valve abnormalities.
* **Hypertensive Heart Disease (HHD)**:
  + Includes left ventricular hypertrophy, diastolic dysfunction.
* **Cardiomyopathy**:
  + Hypertrophic cardiomyopathy (HCM), idiopathic cardiomyopathy, other genetic and acquired forms.
* **Pericardial Disease**:
  + Pericarditis, constrictive pericarditis, pericardial effusion.
* **Rheumatic Fever**:
  + Leading to rheumatic heart disease, with valve damage.
* **Pulmonary Heart Disease (PHD)**:
  + Cor pulmonale, pulmonary hypertension secondary to lung disease.
* **Peripheral Artery Disease (PAD)**:
  + Includes intermittent claudication, critical limb ischemia.
* **Cerebrovascular Disease**:
  + Stroke, transient ischemic attacks (TIAs), brain aneurysms, cerebral artery stenosis.

### Individual Contributions

* **Charlham El**: Researched coronary artery disease, heart failure, and hypertensive heart disease, focusing on diagnostic methods, treatment options, and Nigeria-specific challenges (e.g., limited PCI access, hypertension prevalence). Addressed peripheral artery disease, pulmonary heart disease, and rheumatic fever, focusing on lifestyle interventions and preventive strategies suitable for low-resource settings.
* **Margaret Sylvester**: Compiled data on arrhythmias (atrial fibrillation, ARVD), valvular diseases (aortic stenosis, RHD), and congenital heart diseases, emphasizing diagnostic barriers and regional screening limitations. Covered infective endocarditis, cardiomyopathy, pericardial disease, and cerebrovascular disease, integrating global guidelines with local considerations (e.g., HIV-associated IE, stroke risk).

## 3. Submission Details

* **Deadline**: June 10, 2025
* **Requirements**: Submit as a Word Document (.docx) to the designated academic or clinical supervisor, formatted for patient standard comprehension with clear, accessible language.

## File Format and Size

* Format: Word Document (.docx)
* Size: 1 MB