

Welcome to Heart Failure Society of South Africa GP Update Program, 2011

Program:

Module 1:

- Definition and Classification
- Epidemiology of Heart Failure
- Pathophysiology of Heart Failure
- Specific Diseases causing Heart Failure and practical case studies

Module 2:

- •Diagnosis and Investigation of HF and Practical Case Studies
- Treatment of Heart Failure and Practical Case Studies



HeFSSA is a non-profit medical society with the following objectives:

To promote **research** in all aspects of cardiovascular disease leading to **heart failure** with a special focus on conditions relevant to the population of South Africa.

To promote **collaboration** among those involved in research and treatment of conditions leading to heart failure in South Africa.

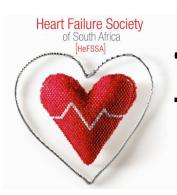
To promote development and monitoring of **guidelines** for diagnosis and management of heart failure in South Africa.

To promote **public awareness** of the prevention and treatment of conditions leading to heart failure in South Africa.

To seek to form **alliances** with other like-minded individuals or organizations both on the African continent and elsewhere.

Become a member and

visit www.hefssa.org regularly to stay abreast of developments in heart failure



Thank You to Our Corporate Supporters!











Definition of Heart Failure

Imbalance between volume of blood supplied and the tissue requirements

Heart Failure is a clinical syndrome with the following features:

1.Symptoms of heart failure (like breathlessness at rest or during exercise, ankle swelling and fatigue

and

2. Signs typical of heart failure (tachycardia, tachypnoea, pulmonary rales, pleural effusion, peripheral oedema

and

3. Objective evidence of cardiac dysfunction (at rest)



Classification of Heart Failure by Structural Abnormality (ACC/AHA)

Stage A:	At risk for HF, but <u>no</u> structural heart disease or signs/symptoms of HF	e.g. HT,CAD, DM, Cardiotoxins
Stage B:	Structural heart disease, but <u>no</u> symptoms of HF	e.g. LVH, prior MI, asymptomatic valve disease
Stage C:	Structural heart disease, with prior or current symptoms of HF	e.g. SOB, fatigue due to LV systolic dysfunction
Stage D:	Advanced heart disease and severe symptoms at rest despite max therapy. Refractory HF	Unable to safely discharge without specialised support, e.g LVAD

Hunt SA et al J Am Coll Cardiol 2001; 38:2101



Classification of Heart Failure by **Symptoms**

New York Heart Association (NYHA)

Classes	Description	1 year Survival Rate
Grade I	Early failure, no symptoms with regular exercise or restrictions	> 95%
Grade II	Ordinary activity results in mild symptoms, but comfortable at rest	80 - 90%
Grade III	Advanced failure, comfortable only at rest; increased physical restrictions	55 - 65%
Grade IV	Severe failure; patient has symptoms at rest	5 - 15%



⇒ Heart failure is a chronic progressive disease



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How big is the problem?

- ***** Four percent of the total Western population has heart failure. (No data available for SA population)
- **❖** With patients over 65 years old, the prevalence is 10%.
- ❖ Lifetime risk of developing heart failure is one in five for a person aged 40 years.
- **❖** Forty percent of patients die within a year of diagnosis and 60% die within five years.
- 'Heart of Soweto Study': Of 6000 newly-referred patients seen at the cardiac clinic, more than 50% had symptoms and signs of heart failure,



Prevalence of Heart Failure in Western Countries (US)

Figures from the US

(This is a 1st world scenario)

Total number

- 5.3 million people

New cases diagnosed

- 660,000/year

This number is increasing annually and reaches 10/1000 after the age of 65.

Mortality (2004)

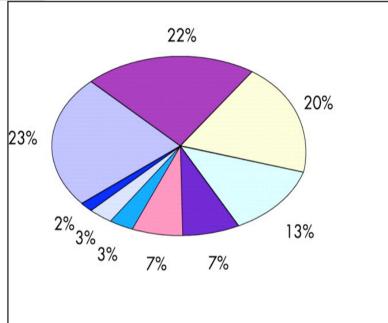
- >284,000 people

80% of patients hospitalised >65 years old



Causes of CVD in

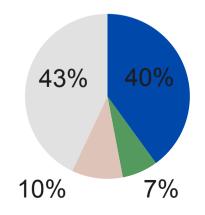
Sub-Saharan Africa vs. Europe



- Hypertension
- Rheumatic heart disease
- □ Cardiomyopathy (i.e., dilated, peripartum, EMF)
- Miscellaneous or undetermined cause
- Cor pulmonale
- Syphilitic heart disease
- Pericarditis
- □ Congenital heart disease
- Ischaemic heart disease

Composite African data , 1957 – 2005/4549 patients, Mayosi et al. HEART 2007

MEN/WOMEN



- AP/MI
- VHD
- Cardiomyopathies
- HTN/LVH

EuroHeart, 2008

Heart Failure Society of South Africa