

UNDERSTANDING CARDIOVASCULAR DISEASE

- Cardiovascular disease (CVD) = heart disease, heart attacks, stroke, atherosclerosis
- CVD falls into the category of Non-Communicable Diseases (NCD's) i.e. these are non-infectious diseases and are mainly due to our modern lifestyles. This category includes cancers.
- Cardiovascular disease is the number one killer in the world, and the number 2 killer in South Africa – 2nd only to HIV/AIDS

CAUSES

1. Majority of CVD (80%) is the result of our lifestyle (poor eating habits, sedentary lifestyle, tobacco use are the 3 main contributory factors)
2. Minority are genetic / inherited

WHY IS CVD A CONCERN?

1. Globally: It is the leading cause of death worldwide
2. South Africa
 - a. It is the 2nd leading cause of deaths – 2nd only to HIV/AIDS; and is on a dramatic rise as more South Africans are adopting a westernized lifestyle. More SA's die of CVD than of all cancers combined.
 - b. Every family is affected by cardiovascular disease. There is no discrimination – whether race, economic or cultural.
 - c. *81% of South Africans* have 1 or more risk factor/s for the development of chronic diseases of lifestyle: overweight/obesity, high blood pressure, high cholesterol, diabetes, physical inactivity, smoking, genetic inheritance
3. United Nations Assembly: A UN Summit is scheduled for September 2011 to address the massive rise in NCD's. Heart disease and stroke tops this list as the biggest killer worldwide.

PREVENT THE PREVENTABLE

80% of CVD can be prevented with a good diet, regular exercise and avoiding smoking

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WHEN DOES IT START?

If a foetus and / or baby is exposed to the risk factors then his / her organs show abnormalities from as young as 2 years of age! This can be in the form of a smoking pregnant mom, exposure to second-hand smoke, poor diet.

WHAT DOES THIS MEAN?

Prevention must start from pregnancy and be maintained throughout childhood. Also, behaviours and habits develop from childhood; it is easier to grow up with good habits that it is to break bad habits as an adult. Adults as parents and role models are responsible for protecting their children. Disregarding what they feed their children is exceedingly irresponsible. Just as parents save for their kids' education, get medical help when necessary, take out life insurance policies, erect high walls and fences and install security systems in their homes – so must they take the precautions to protect their children's' health. If they do not then all other precautions are worthless as the child is destined for early death, disabilities and suffering.

RISK FACTORS

1. Overweight / Obesity
2. Hypertension (High Blood Pressure)
3. High cholesterol
4. Diabetes (High blood sugar)
5. Smoking

1. OBESITY

Obesity is an important risk factor for heart failure and is a “huge” problem in SA. It is generally caused by consuming more kilojoules (energy) than the body needs, whilst simultaneously doing **insufficient physical exercise** to burn the extra kilojoules. They are high risk factors for developing hypertension (a high blood pressure), diabetes and heart disease.

WHAT DOES SA LOOK LIKE?

- More than half of women and almost half of the men in South Africa are overweight or obese, yet:
 - Very few African women (16%) consider themselves overweight. In some cultures being overweight or obese is seen as prosperity.
 - Most South Africans are couch potatoes
 - 76% of men and 86% of women are inactive
 - 33% adolescent boys and 42% adolescent girls in South Africa follow a sedentary lifestyle
- Children
 - 17% of children (1-9 years) are overweight and 5% are obese.



- Youth
 - Less than 70% of high school learners have regularly scheduled Physical Education, and physical education classes in disadvantaged primary schools are even less frequent
 - Less than half of South African youths participate in enough physical activity to be considered health-enhancing
 - Nearly 1 in 3 South African adolescents watch more than 3 hours of television daily, and the trend is rising
- In a recent survey, nearly 30% of adolescents consumed fast food 2 to 3 times per week, and nearly 40% had eaten fast food often. Nearly a half of the adolescents surveyed often buy from the school tuck shop, with more than 1 in 5 buying sweets, chocolates and crisps.
- Well over half the learners reported drinking sweetened cold drinks often (more than 4 times) in the week preceding the interview (1 sweetened cold drink contains approximately 7 teaspoons of sugar! This is equivalent to 2 slices of bread. The sugar contributes to excess calories and overweight. Sugar-sweetened beverages are linked with developing high blood sugar and possible diabetes.
- In a recent study, nearly 20% of the advertising time on South African television was related to food, over half of which was of poor nutritional value – in this regard, it was also found that soft drink advertising was 2 times more prominent than posters related to healthy eating or physical activity.
- Unscrupulous advertising and marketing to children is on the rise. In SA apparently reputable retailers (who claim to have the country's health at heart) line up their till queues with sweets and chocolates to tempt not only adults, but more so – to trap and poison our children.

2. HYPERTENSION (HIGH BLOOD PRESSURE / BP)

- Salt
 - High salt intake is strongly associated with high blood pressure
 - South Africans generally consume more salt than the WHO recommended maximum of 5g/day (about 1tsp). Apart from table salt, flavour enhancers and soup powders, bread and cereals are the major contributors to total sodium intake from processed food for South Africans. Bread provides the greatest contribution to total dietary sodium intake – South African bread has a salt content that has remained higher than in most other countries. The Australians and British have successfully reduced levels.
- About ¼ of South Africans suffer from hypertension (high blood pressure). This occurs more frequently in those who are overweight/obese, those who use too much salt (sodium) and eat too little fruits and vegetables as well as those who consume a lot of alcohol. Much of the damage that hypertension causes can be prevented if diagnosed early and treated adequately – reducing cost to patients, the health services and the economy.

Recommendations

All adults should do at least 30min of moderate intensity physical activity (brisk walking, swimming, dancing, sports) on most days.

This can be in a single session or accumulated in multiple bouts, each lasting about 10minutes a time.

This is manageable with a few small changes (park your car further away, take the stairs – why pay to use the stepper / treadmill in the gym if you use a lift??, do some housework or gardening – it all adds up)

3. SMOKING

- Nicotine is the most addictive substance known to man
- Smoking cigarettes or any other tobacco product is lethal and will kill half the people before the age of 60 years if they start smoking at a young age and continue through their adult life
- There is no safe level of exposure to tobacco products
- The prevalence of smoking decreased by 8% (from 32% to 24%) after the implementation of tobacco control policies. Yet little effect is noted in youth – this is despite the improvements of legislation with regards to the sale of tobacco to children and youth (from 16 to 18 years)
- 42% of adult men and 11% of adult women smoke. The Western Cape has more women smoking than elsewhere in the country.

The risk of female smokers dying from CVD is equivalent to the risk associated with weighing 42kg more than a non-smoking female

- The majority of smokers start before the age of 19, with 7% starting under the age of 10 years.
- The percentage of South African adolescents who smoke is almost double that of global prevalence estimates
- More current adolescent smokers (43%) vs. non-smokers (23%) had one or more parent/guardian who smokes, and a relationship of conflict with parents has been shown to influence smoking behavior in adolescents
- Only 15% of adolescents actually refused to smoke when they were offered by their peers

4. HIGH CHOLESTEROL

- It was last recorded that 5 million South African adults have a high blood cholesterol level, where 4% of men and 5% of women die because of the impact of it
- High cholesterol (and LDL type of cholesterol) and Triglyceride level are associated with high risk for CVD (increases risk by 32% in men and 76% in women)

5. DIABETES (HIGH BLOOD SUGAR)

The relative risk of fatal CVD events in diabetics (versus non-diabetics):

- Women: 4
- Men: 2

GENERAL STATS

- CVD kills 200 people in SA every day
- About 130 heart attacks and 240 strokes occur daily in SA
- For every woman that dies of CVD, 2 men will die
- Premature deaths caused by CVD in people of the working age (35-64yrs) are expected to increase by 41% by 2030. The negative economic impact of this will be enormous on both families (as this is the bread-winner age) and on the country.

*Good control of BP can prevent heart disease and stroke in 37% of men and 56% of women
If BP and Cholesterol is controlled well 82% of CVD events can be prevented
For every 20mmHg difference in systolic BP there is a 2 x difference in death rates due to stroke*