

# Women and Cardiac Disease

Auckland Heart Group  
Nurse Symposium  
Saturday 11<sup>th</sup> May

# Leading Causes of Death in New Zealand, 2000

	Males	Females	Total
	%	%	%
Coronary heart disease	24	21	22
Other diseases of the heart and circulation	7	10	8
Cerebrovascular disease	8	13	10
Cancer	30	27	29

# Selected Causes of Death in New Zealand Women, 2000

Rate per  
100,000

Coronary heart disease	56
Hypertensive disease	3
Cerebrovascular disease	32
Breast cancer	21

# Perception of Risk of Myocardial Infarction

North American telephone survey

- 44% women thought they were unlikely to have a myocardial infarction in their lifetime
- 55% perceived their risk of breast cancer to be equal or greater than the risk of heart disease

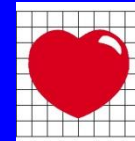
Wenger. Int J Fertil 1998; 43: 84 - 90.



# Cause of Death in Women According to Ethnic Origin per 100,000

	Maori	Pacific people	Others
Coronary heart disease	114	67	51
Hypertensive disease	6	12	2
Cerebrovascular disease	47	64	29
Diabetes	45	60	7

2000



AUCKLAND  
HEART  
GROUP

# Symptoms of Coronary Disease

## Gender Differences

Classical chest pain for AMI

85% men

75% women

Goldberg Am Heart J 1993; 136:189-95

# Delay in Seeking Treatment for Cardiac Symptoms - Gender Differences

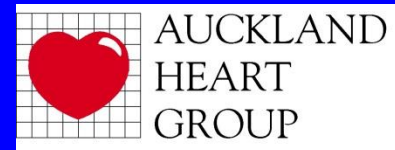
Women suffering an acute myocardial  
infarction present later to hospital

Sonke. BMJ 1996;313:853-5

# Reasons for Delay in Presentation with Symptoms of Heart Disease

- Difficulty recognising symptoms
- Self-treatment
- Obtaining reassurance
- Using traditional coping strategies for menstruation and child-birth

Cheryl Campbell, 2005. PhD thesis





# WISE Study

## Women's Ischaemic Syndrome Evaluation

### Symptomatic Presentation

#### Typical symptoms

More common in older women

#### Atypical Symptoms

Fatigue

Sleep disturbance

SOB

#### Functional Limitation ( $\leq 4.7$ Mets)

Highly predictive future cardiovascular event  
(67% events)

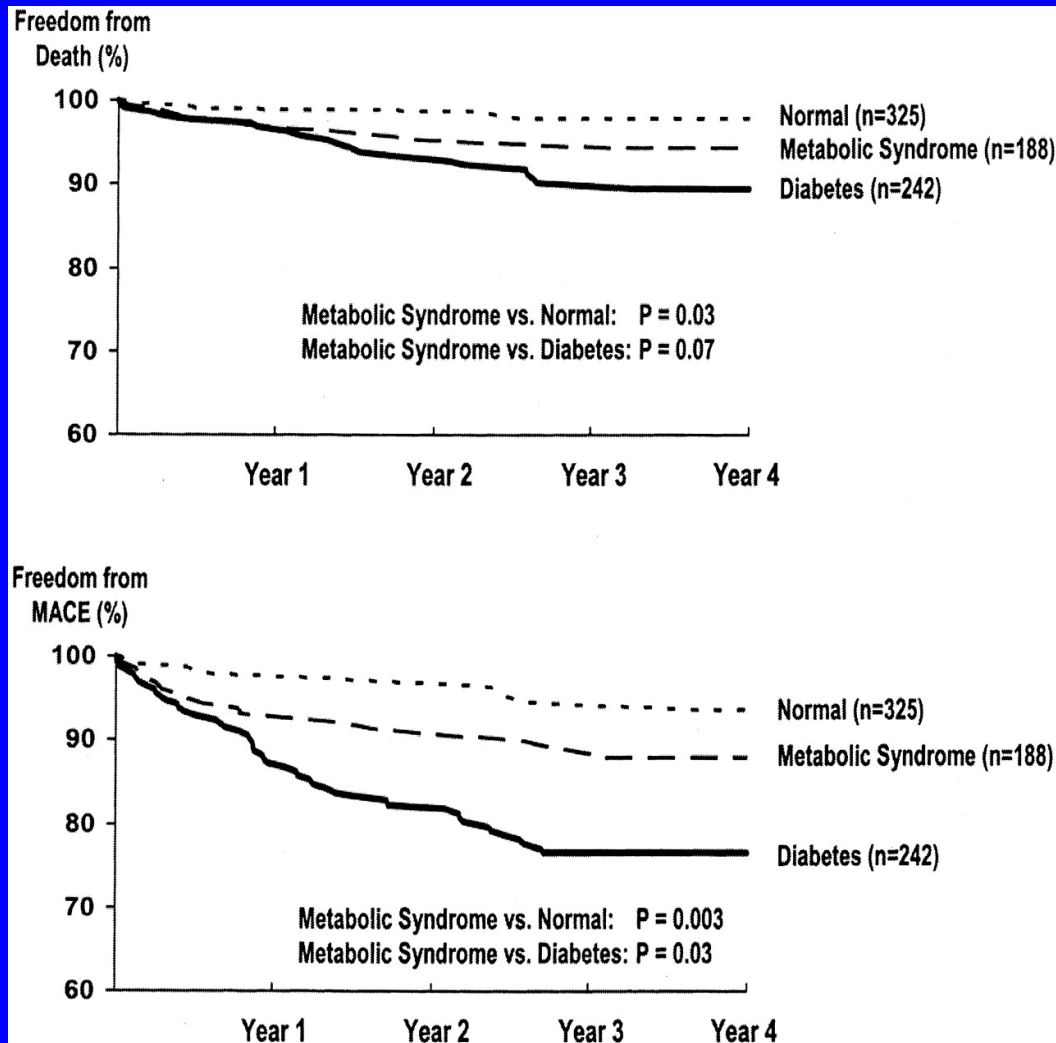
# WISE Study

## Risk Factors for Cardiovascular Events in Women

- Diabetes
- Metabolic syndrome (not BMI)  
+  $\uparrow$ hsCRP = DM risk
- $\uparrow$ hsCRP
- Hb < 120g/l
- $\uparrow$  SBP (premenopause) RR 5.6 (2.18 – 14.3)
- Oestrogen deficiency premenopause  
(anovulatory cycles) RR 7.4 (1.7 – 33.3)

# WISE Study

## Event-free survival by metabolic status in women



Shaw, L. J. et al. J Am Coll Cardiol 2006;47:S4-S20



# WISE Study

## Psychological Effect of Persistent Chest Pain With or Without Obstructive Coronary Disease

### Significantly Increased

- Frequency of symptoms
- Number of symptom locations
- Depression score
- Anxiety score

### Significantly Reduced

- Age
- Quality of Life perception

# Prevention of Cardiovascular Disease in Women

## Lifestyle Interventions

- Stop smoking
- Physical activity - 30min most days
- Cardiac rehabilitation
- Heart - healthy diet
- Weight maintenance/reduction

BMI 18.5 - 24.9

# Prevention of Cardiovascular Disease

## Pharmacological Treatment

- BP  $\leq 140/85$
- Lipids - LDL  $\leq 1.8$  mmol/l
- Diabetes - HbA<sub>1c</sub>  $< 50$

# Prevention of Cardiovascular Disease

## Hormone Replacement Therapy

Combined HRT and Estrogen only HRT

- Increase the risk of stroke
- Increase the risk of myocardial infarction
- Do not prevent cardiovascular disease

# Women at the Heart of the Family

Women are the pivotal figure in most homes

- They purchase and cook most of the food
- Are more likely to be the primary caregivers and educators of children
- They support their partner - Married men are more likely to attend cardiac rehabilitation than women or unmarried men



# The Challenge of the Health Professional

## Improving the Cardiovascular Care of the Community

- Educate women on their risk of cardiovascular disease
- Identify high risk women
- Encourage healthy lifestyle changes for women
- Treat risk factors
- Investigate and treat symptoms