

Awareness, perception and knowledge of cardiovascular disease and prevention among residents in the north western districts of Adelaide

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Background

- Cardiovascular disease (CVD) is the leading cause of death and disability in Australia
- Overseas studies have shown that awareness, perception and knowledge of CVD vary considerably amongst the patient population
- Such poor cardiovascular health literacy may impede preventive efforts and the adoption of positive lifestyle changes
- Cardiovascular risk assessment may assist individuals to increase awareness and modify lifestyle choices

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Research Objectives

- To establish major health concerns, awareness and understanding of CVD and risk among residents in the North Western Districts of Adelaide
- To calculate absolute risk of CVD in the next 5 years for each participant, and agreement between objective and self perceived risk
- To explore associations between CVD risk and risk factors: smoking status, family history of premature heart disease, education level, chronic health conditions and self perceived rating of health
- To investigate the relationship between perceived risk and preventive behaviours

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Methods

- Participants: Continuing members of North West Adelaide Health (NWAH) Study, a longitudinal, representative, population based, cohort study exploring chronic conditions in the north-west region of Adelaide, SA, aged ≥ 18 yrs
- Data collection: CATI, self-administered postal questionnaire & biomedical clinic visit
- Stage 1: 2000-03 (n=4,060)
- Stage 2: 2004-06 (n=3,206)
- Stage 3: 2008-2010
 - Interim analysis on current participants to April 09 (n=846)
 - Statistical Analysis on weighted data, descriptive statistics & chi square testing
 - Final analysis on complete cohort to June 2010

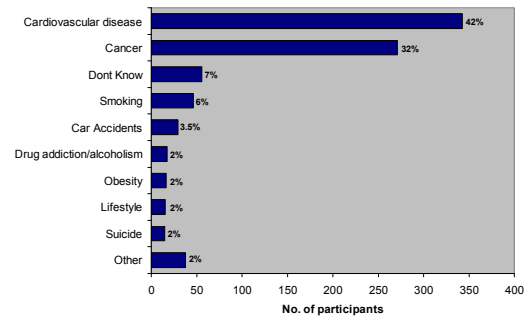
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Results

- CVD awareness and knowledge
- Participant characteristics
- Absolute cardiovascular risk
- Self perceived cardiovascular risk
- Agreement between absolute and self perceived CVD risk

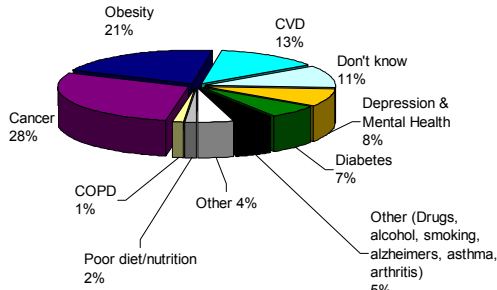
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As far as you know, what is the leading cause of death in Australia?



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Most important health condition or illness facing people in Australia today?



Have you seen, heard or read information about CVD within the past 12 months? From what sources?

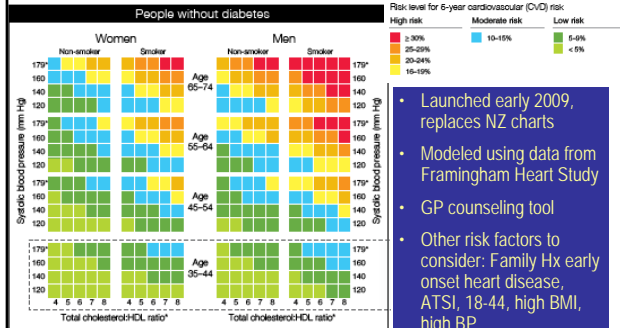
- 62% replied 'yes', males (66%) > females (58%) $\chi^2 = 6.16, p = 0.0131$
- Television (39%), newspapers (24%) and magazines (18%) most highly rated sources
- Books (4%), radio (7%) and GP (7%) least rated sources
- Women more likely than men to obtain information from magazines (25% v 12%), books (6% v 2%) or GP/specialist (11% v 4%) $\chi^2 = 16.3, p < .0001$
- Men more likely than women to obtain information from internet (18% v 6%) $\chi^2 = 16.3, p < .0001$

Characteristics of the cohort (n=846)

Characteristic	Males (n = 409)	Females (n = 437)
	No. (%)	No. (%)
Age (yrs)	49.21 (16.56)	51.00 (16.74)
Current Smoker	73.73 (18.00)	60.46 (13.85)
Past Smoker	133.69 (42.44)	158.13 (43.25)
BMI ≥ 30 kg/m ²	129.75 (31.69)	151.25 (34.65)
Diabetic	34.12 (8.33)	34.77 (8.01)
History of CVD	35.60 (8.69)	21.94 (5.02)
Antihypertensive Meds	88.84 (21.69)	91.04 (20.85)
Lipid Lowering Meds	70.12 (17.13)	79.67 (18.25)

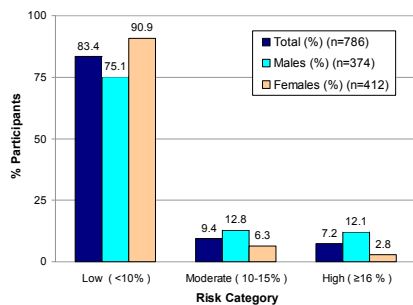
* Mean (SD)

Australian Cardiovascular Risk Charts

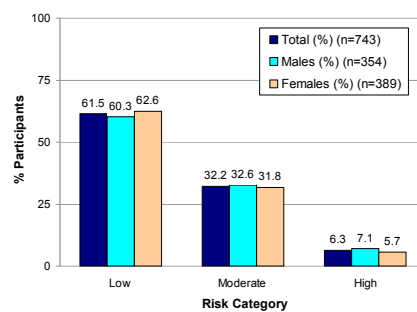


- Launched early 2009, replaces NZ charts
- Modeled using data from Framingham Heart Study
- GP counseling tool
- Other risk factors to consider: Family Hx early onset heart disease, ATSI, 18-44, high BMI, high BP

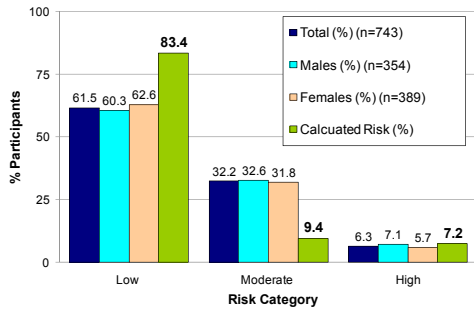
Absolute Risk of CVD 5 years



Self Perceived Risk of CVD 5 years



Self Perceived Risk of CVD 5 years (+ Absolute Risk)



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Absolute v Self Perceived Risk – Cross Tabulations

Perceived Risk	Absolute Risk			
	Low 0-9%	Mod 10-15%	High ≥16%	
Low	395 (63%)	40 (63%)	21 (43%)	456
Mod	198 (31%)	19 (30%)	21 (43%)	238
High	36 (6%)	5 (7%)	6 (13%)	47
	630	63	49	741

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Conclusions

- Most people correctly chose CVD as leading cause of death but rank cancer as most important health issue
- Most people had heard about CVD in the last year; information predominantly from TV, newspaper & magazines
- Majority of sample (83%) had low absolute risk of CVD in next 5 yrs
- More men than women had moderate (12.8% v 6.3%) or high (12.1% v 2.8%) absolute CVD risk
- 57% of sample correctly perceived their CVD risk to be low
- 11% individuals underestimate their high or moderate risk ⇨ would benefit most from counselling and advice from health care professionals
- Future analyses on complete Stage 3 cohort will better characterise this target group

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Acknowledgments

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- More information, contact details:
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Limitations

- Did not adjust for: ATSI, familial hypercholesterolaemia, family history of early onset CVD, SBP ≥ 110 mmHg, serum total cholesterol > 7.5 mmol/L – may be underestimating risk
- Risk tables not validated for 18-44 age category, however were included in this interim analysis - may be overestimating risk
- Final analysis planned on complete cohort (2010) will adjust for these limitations and further explore original study objectives

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