

TOWARDS A HEALTHY HEART

Jacki Carmody
Primary Care Programs Manager

Vicki Barbary
Community Health Nurse



Problem Definition

- Cardiovascular disease (CVD) is Australia's leading cause of premature death
- Rural men are one of the high risk population groups
- Portland District Health observed an increase in cardiac related admissions among men aged 30 to 60⁽²⁰⁰¹⁻²⁰⁰⁵⁾



Rural Men

- A local survey of rural workers revealed:
 - more than half surveyed were over weight
 - did not complete the recommended level of physical activity
 - consumed less than the recommended serves of fruit and vegetables
 - consumed harmful amounts of alcohol
 - did not partake in health screening
 - More than 30% did not have a registered general practitioner



Towards a Healthy Heart

- Structured primary prevention program
- Targets men, aged 30 to 60, working in local industrial organizations
- Uniquely links health, sport, local government and industry to promote sustained behaviour change
- Held on site at the work place
- Supported by employer and employee contributions



Objectives

- Towards a healthy heart aims to:
 1. Engage with men, aged 30 to 60 working in blue collar / industrial organisations in Portland, Victoria.
 2. Promote risk factor reduction for heart disease in men aged 30 to 60 through the provision of a structured heart health program
 3. Link health, industry and sport together when working to improve the health of men aged 30 to 60 living and working within Portland Victoria and the surrounding Districts.
 4. Develop and promote a model for working with rural men around reducing the risk of heart disease, particularly men working in industrial organisations.



Method

Recruit Workplace	Info Session	Reg and Consent	Pre Program	12 week Intervention	Post Program	Booster Education	6 months	12 months
			1		2		3	4
			83		65		45	47

July 2005 – August 2007

- 12 weeks intervention
 - 1 hour structured education each week
 - 1 hour physical activity at local sporting facilities
- Booster education at 6 months
- Health Coaching
- Referral to primary care practitioners where appropriate



Risk Factor Under Investigation

Cluster	Risk Factor	Measurement	Healthy Range
Clinical	Total Cholesterol	mmol/L	<5.4
	HDL	mmol/L	>1.0
	LDL	mmol/L	<3.4
	Triglycerides	mmol/L	<2.2
	Glucose	mmol/L	<6.0
Physiological	Resting Heart Rate	bpm	
	Blood Pressure - Systolic	mmHg	<120
	Blood Pressure - Diastolic	mmHg	<80
	Weight	kg	
	Waist	cm	<94
	Body Mass Index	weight to height ratio	<25
Psychological	Depression	level of depression	<7
	Anxiety	level of anxiety	<7
Lifestyle	Nutrition	% of dietary fat	<30%
	Physical Activity	minutes per week	>150
	Smoking	cigarettes per day	
	Alcohol	level of risky consumption	<7



Outcomes

- The programs outcomes was evaluated on several levels
 - Risk factor reduction (clinical, physiological, psychological and lifestyle)
 - Level of engagement and participation
 - Flow-on affect through workplace
 - Sustained behaviour change



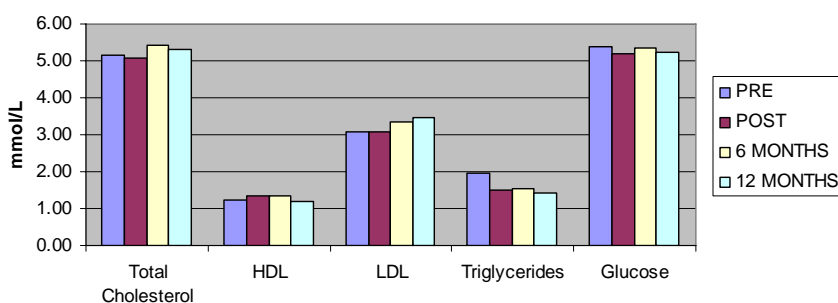
Pre Program

- 100% of participants had at least one risk factor
- 31% had clinical measures above the clinical cut off
- 83% had a BMI greater than 25
- 19% had high blood pressure
- 80% had an average diet containing 34.5-37.5% total fat and 13.2-15.5% saturated fat (recommended <30% total, < 11% saturated)
- 90% were not undertaking the recommended levels of physical activity (recommended 30-60 minutes most days of the week)
- 50% consumed alcohol in harmful amounts (>7 WHO alcohol audit)
- 22% smoked cigarettes
- Based on data obtained at the pre program risk assessment, 12 participants were prescribed cholesterol medication (14%), 7 were prescribed blood pressure medication (8%) and 4 were sent for follow up glucose tolerance tests (5%).



Clinical Risk

Clinical Risk Factors



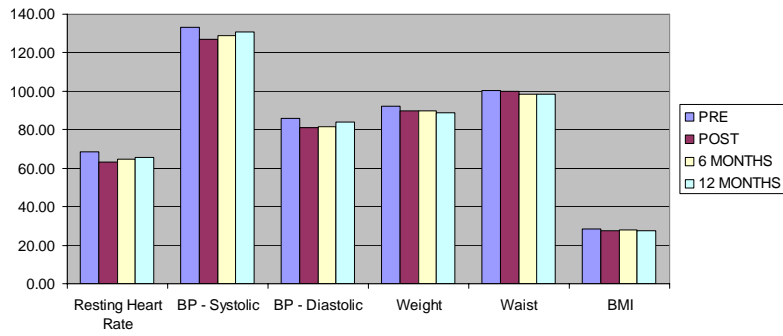
Participant drop out rates between assessments

Pre = 83 Post = 65 (21.69%) 6 months = 45 (45.78%) 12 months = 47 (43.37%)



Physiological Risk

Physiological Risk Factors



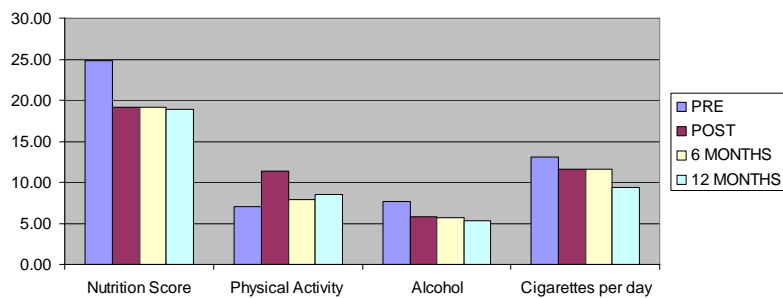
Participant drop out rates between assessments

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Lifestyle Risk

Lifestyle Risk Factors



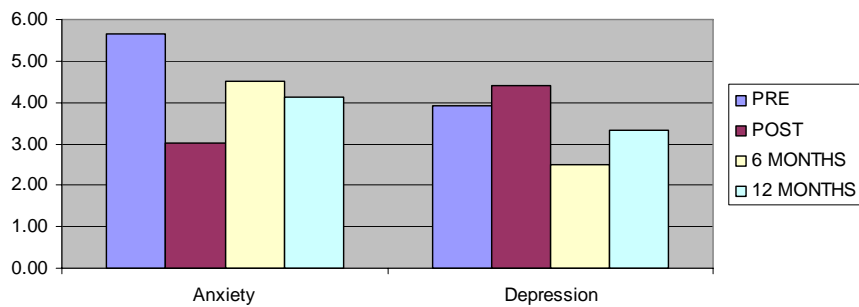
Participant drop out rates between assessments

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Psychological Risk

Psychological Risk Factors



Participant drop out rates between assessments

Pre = 83 Post = 65 (21.69%) 6 months = 45 (45.78%) 12 months = 47 (43.37%)



Consumer Engagement and Participation

- Industry representatives on the stakeholder committee that developed the program
- Key contact at each workplace was a participant in the program
- Mix of staff and management in the program
- Employee and employer contribution to the program
- 5 different organisations with varied core business statements



Organisational flow-on

- Further requests for health assessments, presentations, education and programs
- Health included in some staff newsletters
- Workplace based physical activity challenges
- One workplace has requested the program be repeated for the remaining staff (including women)



Sustained Behaviour Change

- Pre and Post
 - HDL, triglycerides, resting heart rate, blood pressure, weight, BMI, depression, anxiety, nutrition, physical activity and alcohol
- Pre and 6 months
 - Triglycerides, waist, weight, BMI, nutrition and alcohol
- Pre and 12 months
 - Triglycerides, weight, BMI, nutrition and alcohol



Key learnings

- Adherence to medication is an important issue
- Some risk factors are amenable to change more so than others
- Impact of family support on behaviour change
- Multiple risk factor intervention allows for greater exploration of risk factors given synergistic nature
- Greater investigation is needed around the barriers to change for risk factors where sustainable change was not seen



Future Direction

- Apply for funding to conduct 2 and 5 year post program completion risk factor assessment
- Shared learning's through finalisation of program manual
- Apply for further funding to review and repeat



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Contact details

- For further information regarding Towards a Healthy Heart please contact:

Jacki Carmody
Primary Care Programs Manager
Portland District Health

jecarmody@swarh.vic.gov.au

03 5522 1180

