

## Heart health for our people by our people—new way cardiac rehab program

Lyn Dimer<sup>1</sup>, Ted Dowling<sup>2</sup>, Jane Jones<sup>3</sup>, Craig Cheetham<sup>4</sup>, Andrew Mairorana<sup>5</sup>

<sup>1</sup>Heart Foundation WA, <sup>2</sup>Royal Perth Hospital and Derbarl Yerrigan Health Service, <sup>3</sup>Derbarl Yerrigan Health Service, <sup>4</sup>West Australian Cardiac Rehab Association, <sup>5</sup>Royal Perth Hospital and Curtin University

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Lyn Dimer is Coordinator of the Aboriginal health program within the Heart Foundation and has worked in this role, in Western Australia, since the year 2000. Lyn has dual qualifications in health and education, and, as a qualified enrolled nurse, currently works on weekends at the Armadale General Hospital. Lyn is passionate about improving the health of Aboriginal people; she works constantly to increase access to services and equality, which will lead to optimal care for Aboriginal people who have, or are at risk of, cardiovascular disease. Lyn is a wife, mother and grandmother and her family is the most important thing in her life and have given her inspiration to remain true and loyal to the field of Aboriginal health and sharing her culture with people she meet.

Ted has worked as a clinical nurse at Royal Perth Hospital in the busy Coronary Care Unit since 1995. Since 2008 he also has worked as clinical nurse specialist at Derbarl Yerrigan Health Service; developing and delivering a heart health program (in collaboration with the Aboriginal community). Ted has been involved with the Look Good Feel Better program and coaches junior sport (both in a voluntary capacity), all of which has led to him being nominated as Runner up in the WA Nurse of the Year Awards, 2009.

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### Background

Cardiovascular disease (CVD) continues to be the leading cause of premature ill health and death among Aboriginal people, culminating in a 17 year difference in life expectancy between Aboriginal and non-Aboriginal Australians. However, much of the CVD experienced by Aboriginal people is potentially preventable through lifestyle modification. Reducing risk factors for CVD, such as smoking, physical inactivity and poor nutrition has the potential to substantially improve the health and quality of life of Aboriginal people and to reduce the burden of disease on Aboriginal communities. To achieve this, culturally appropriate and sustainable cardiac rehabilitation programs are required—less than 5% of eligible Aboriginal patients attend traditional cardiac rehabilitation programs in the tertiary hospital setting.

### Project description

*Heart Health—For our people by our people* is a culturally appropriate cardiac rehabilitation program for Aboriginal people. It is centred around education (formal and informal, involving yarning and lots of imagery), physical activity and support for behaviour change conducted in a socially supportive environment within an Aboriginal Medical Service (AMS) namely Derbarl Yerrigan Health Service Inc. The program embraces Aboriginal culture and ways of working to provide a culturally secure ‘hub’ around which improved health awareness can be achieved and broader health promoting activities can be facilitated. The program is conducted every Thursday.

#### Key methodology

- Small, informal group discussions—‘yarning’
- Sometimes separate men and women sessions depending on topic discussed
- Sometimes one on one sessions are held
- Education by demonstration: record BSL pre and post exercise to show decrease
- Imagery to explain medical concepts and depict real discussion by all participants eg. food labelling session conducted with food labels of real foods/snacks etc
- Culturally appropriate written resources with Aboriginal people on literature, simplified language within removing a lot of medical jargon

- Healthy morning tea and lunches provided to encourage uptake via experience also to engage people in a social gathering

## Observations

Approximately 120 people have participated in the program with 20 to 30 participants attending each week. There have been days when there is a 50–50 split of men and women, sometimes men outnumber the women and vice versa.

In a subgroup of 27 participants who have attended at least 8 sessions, with health and fitness assessments pre and post, we have observed significant reductions in blood pressure, waist girth and exercise capacity (6 minute walk test distance). Body weight has also decreased slightly but didn't reach statistical significance. See table below.

Parameter	Pre-program	Post-program	P
SBP	135 ± 20 mmHg	120 ± 16 mmHg	P<0.01
DBP	77 ± 11 mmHg	72 ± 6 mmHg	P<0.05
Weight	91.8 ± 17.8 kg	90.3 ± 17.8 kg	P=0.10
Waist girth	112.9 ± 13.6 cm	108.6 ± 13.2 cm	P<0.01
6 min walk test dist.	294 ± 115 m	344 ± 135 m	P<0.01

Some individuals have achieved quite remarkable outcomes ...

## Case study

- 55 yr old male strong family history
- Med Hx: type 2 diabetes, sleep apnea
- Cardiac Hx: angina 1992, MI 1996, PTCA 2007

Parameter	Pre (20/8/09)	Post (4/3/10)
BP (mmHg)	120/70	110/70
Weight (kg)	97.1	85.1
Waist (cm)	120cm	104
6MWT (m)	342	410
FBS (mmol-1)	10.4	6.6
Physical Act.	Sedentary	45 min daily

Other interesting observations include:

- common drug compliance issues
  - sharing medication
  - taking every second day to cut costs
  - Anginine expiry dates
  - taking half a tablet to make them go further.

\*Involvement in Heart Help has enabled these problems to be identified and addressed

A key to the success of the program is due to the social support it offers. Quote from participant:

I like the lectures, friendliness, regular BP and sugar checks and support the professionals give us. Getting together and sharing with others who have the same problems is very helpful

Many of the referrals to the program have been via word of mouth. We've observed that once community members attend and find the program is supportive and enabling, they tell their families and friends, as evident in this statement by a participant:

"I came down as a result of a fridge magnet shown to me by a cousin.

The *Heart Health* environment has provided an opportunity to engage participants in a wide range of health issues, meaning that health is being addressed holistically. For instance, topics addressed to date, at the request of participants, have been as diverse as incontinence, optometry and dental health. There is also psychosocial support getting people from centrelink, advocare and St Johns come and talk to the group.

Several participants have formed a musical band "The Heart Aches"—plays monthly to other participants at the program

Some key stats: Aboriginal and Torres Strait Islander people compared with other Australians are:

- 1.3 times as likely to have cardiovascular disease
- Three times more likely to have a major coronary event such as a heart attack
- More than two times as likely to die in hospital from coronary heart disease.

The program was initiated and support with funding from the OATSIH – DoHA through the Heart Foundation and is now completely funded and owned by Derbarl Yerrigan Health Service Inc.

It also provides cultural safety and security by up-skilling and training Aboriginal Health professionals employed by the Medical Service to provide ongoing continuity of care.