

## **Integrated health promotion is making a difference.....**

A practical example:

### **Portland District Health & Southern Grampians Glenelg PCP: Towards a Healthy Heart PART 2**

'Towards a Healthy Heart' is a structured primary prevention program to address the risk factors for heart disease in 'hard to reach men', with the aim of reducing the total risk factors for heart disease for men within the high-risk age group of 30-60 years blue collar / industrial organizations in Portland, Victoria.

Portland District Health and Southern Grampians Glenelg Primary Care Partnership initiated the program idea. Funding and advice for the initial pilot was provided through the Southern Grampians Glenelg Primary Care Partnership which was run by Portland District Health and involved 16 participants.

Stakeholders of the program include:

- Southern Grampians Glenelg Primary Care Partnership
- Portland YMCA
- Portland Physiotherapy Centre
- Portland District Health
- Portland Leisure and Aquatic Centre
- St John of God Pathology
- Portland RSL Memorial Bowling Club
- Portland Squash and Racquetball Club
- Portland Hockey Club
- Portland Indoor Cricket Centre
- Local Portland GPs
- Monash University
- William Buckland Foundation
- Glenelg Shire Council
- Portland Aluminium
- Port of Portland
- Incitec Pivot
- Graincorp
- Fechner Engineering

### **What has been the integrated health promotion response?**

Towards a Healthy Heart builds on the lessons learned from similar programs like Gut Busters, Waistaway, Quit Fresh Start and Food for Thought. Tackling the major risk factors for heart disease as outlined by the National Heart Foundation's, Towards a Healthy Heart is unique in that it links partners in health, sport, industry and local government to bring about sustained change in this hard to reach group. The program consists of four risk factor assessments (pre, post, 6 months and 12 months), twelve weeks of group education, weekly physical activity sessions at local sporting facilities and fitness centers, and individualized health coaching (where necessary) to promote behavior change.

Strategies and Interventions Used:

- Risk Factor Screening – risk factor assessments conducted pre, post, 6 months and 12 months
- Health Information and Social Marketing – provision of health information pre, post, 6 months and 12 months; assistance with workplace newsletters and mail outs
- Health Education and Skills Development – 12 weeks of education and physical activity; health coaching provided to participants where necessary and requested
- Organizational Development – liaising with management around releasing workers for health promotion education; working with workplaces around providing a healthy environment to support participants through behavior change
- Resources – providing participants and workplaces with resources to support the program at conception, during implementation and past program completion

## **What has been the inter-sectoral collaboration?**

It was important from the projects conception that a key stakeholder committee be developed to drive the programs development, pilot and evaluation. This committee involves representatives from health, sport, local government, industry and consumers. Due to the large nature of the physical activity component, the actual running of the physical activity was shared between 8 local sporting facilities. This process has developed further partnerships between health and sport and enabled connections to be made to promote sustainability for participants to become regularly active.

One key success component of the program has been the consultation with the implementing industry organisations. Each organisation supported the program not only through access to employees but through enabling the program to occur in work time with no penalties to employees.

## **How important was consumer participation?**

Consumer participation occurred in two important ways each was equally important and significant to the programs successes. The first was through involvement in the stakeholder committee, the second was through the program itself. It was important to establish joint ownership of the program from its conception. This occurred through Portland District Health's drive and development of the program, the industries support of the program through access to employees but most importantly each participant had to commit to a significant amount of time outside of work to take part in the program. The split was equal between employer and employee time.

## **What are the impacts?**

'Towards a Healthy Heart' is a structured program to address the risk factors for heart disease in men, with the aim of reducing the total risk factors for heart disease for men within the high-risk age group of 30-60 years. The program consisted of ten weeks of group education and weekly physical activity sessions supported by booster education sessions and health coaching to promote sustainable behaviour change. Risk factor assessments were conducted prior to the programs implementation (pre program), immediately following (post program) and 6 months and 12 months post program completion.

Eighty three participants were recruited at commencement, 65 remained post program, 45 at 6 months and 47 at 12 months (participant numbers and subsequent data analysis includes paired cases whether consent to participant in research was provided).

Risk factors were grouped based on commonality – clinical, physiological, lifestyle and psychological. The results show a reduction in risk across all risk factors with a reduction occurring between pre and post, pre and 6 months and pre and 12 months.

As expected the reduction in risk was greatest for pre to post program however behavior change was sustained at both 6 and 12 months.

### **Pre program...**

All participants had at least one risk factor at the pre program (baseline) assessment. Clinical measures indicated 68.29% of participants had clinical measures within the healthy range (total cholesterol <5.4 mmol/L, HDL >1.0 mmol/L, LDL <3.4 mmol/L, triglycerides <2.2 mmol/L, glucose <6.0 mmol/L) with 31.71% registering blood pathology levels above the clinical cut off. The average total cholesterol reading was 5.17 mmol/L, HDL 1.24 mmol/L, LDL 3.06 mmol/L, triglycerides 1.95 mmol/L and fasting blood glucose 5.38 mmol/LI.

Approximately 17% of participants had a BMI less than 25 (average BMI = 28.71). On average 19.51% of participants had a blood pressure above normal (120/80 mmHg). The average waist measurement exceeded the recommended <94 cm (average=100.5cm). Approximately 80% had an average diet containing 34.5-37.5% total fat and 13.2-15.5% saturated fat. While physical activity levels appeared greater than the recommended 30 minutes per day (averaging 60 minutes per day; average=418.97 minutes per week); self report measures revealed walking at work contributed to more than 95% of this activity, most of which was below a rate which would raise the heart rate. Fifty percent reported harmful levels of alcohol consumption with 21.95% smoking on average 13 cigarettes per day. In relation to depression and anxiety, 27.5% of participants registered elevated anxiety levels with 6.2% registering elevated depression scores.

100% of participants had at least one risk factor for heart disease; 27% of the participants when entering the program did not have a registered general practitioner and approximately 30% had not been to their general practitioner in the last 2 years.

Based on data obtained at the pre program risk assessment, 12 participants were prescribed cholesterol medication, 7 were prescribed blood pressure medication and 4 were sent for follow up glucose tolerant tests.

### **Post program, 6 months and 12 months...**

Approximately 17.1% of participants had a healthy BMI pre program compared to 21.9% post program, 20.0% at 6 months and 23.4% at 12 months. Participants lost an average of 3kg which was sustained at 6 and 12 months. Waist measurements below 94cm increased from 30.9% pre program to 37.8% at 6 months, and 34.0% at 12 months. Analysis of range scores indicated 28.5% were at risk of anxiety pre program this reduced to 10.9% post, 14.0% at 6 months and 8.5% at 12 months.

Prior to commencing the program, 12.5% of participants had a diet containing less than 30% total fat and less than 11% saturated fat. Post program this increased to 34.9% and was maintained at 6 and 12 months at 31.1% and 34.0% respectively. Pre program 61.8% of participants completed the recommended 30 minutes of physical activity each day of the week. This percentage increased to 91.9% immediately post program and maintained at 77.8% at 6 months and 74.5% at 12 months.

Drinking patterns significantly reduced between all time points. Approximately half of participants self reported hazardous drinking patterns, this was reduced to 27.0% at post, 23.8% at 6 months and 24.5% at 12 months.

After examining the smoking behavior of smokers, the results indicated the mean number of cigarettes smoked per day decreased from 13.06 at pre to 11.64 at 6 months and 9.39 at 12 months. The number of smokers reduced from 18 (pre) to 9 (12 months); the lowest being 5 at 6 months

In terms of sustainability of behavior change, a series of two tailed, paired sample t tests indicated a significant improvement ( $p < .01$ ) from base line (pre program) in HDL, triglycerides, resting heart rate, blood pressure, weight, BMI, depression, anxiety, nutrition, physical activity and alcohol consumption immediately following the programs completion (post program). Sustainability at 6 months and 12 months (compared to pre program) was indicated for triglycerides, weight, BMI, nutrition and alcohol consumption. There was no sustainable change found in total cholesterol, blood pressure, waist measurements, physical activity, depression, anxiety or smoking cessation at 12 months post program completion.

## **What's next?**

The aim for the future is to secure funding to invite participants to return for 2 and 5 years post program risk factor assessments; as a measure of sustained behaviour change.

Following the completion of the final assessment late last year, the programs is being written up for dissemination to interested parties.

Some of the finding will be published through journals – first part will be the health status of rural men given the important results identified by the pre program assessment.

As always, apply for further funding to implement the changes identified through the evaluation process and repeat the program with at risk target groups.

Further more, this program highlights the importance of developing multiple risk factor health promotion interventions that modify all known risk factors for cardiovascular disease. Future research is necessary to identify the barriers to changing risk factors that were not amenable to change.

## **Further information**

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