



## Free Papers Presentation

# Cardiac Health Promotion Program in the Community “Eat healthy and get active: a lifestyle to start and keep !”

Author: Chan K M <sup>1,2</sup>, Leung K C <sup>2</sup>, Leung K P <sup>2</sup>, Tang S W <sup>2</sup>, Chair S Y <sup>3</sup>, Cheung S C <sup>4</sup>

Institution: Physiotherapy Department, Tung Wah Eastern Hospital<sup>1</sup>

Department of Medicine and Rehabilitation, Tung Wah Eastern Hospital<sup>2</sup>

Nethersole School of Nursing, Faculty of Medicine, The Chinese University of Hong Kong<sup>3</sup>

Care for your Heart – Cardiac Patient Mutual Support Association<sup>4</sup>

## Introduction:

Coronary heart disease (CHD) was the dominating component of heart disease in 2007. Most of the risk factors for CHD and are preventable. A community partnered cardiac health promotion program which was funded by the Health Care and Promotion Fund, Food and Health Bureau, was launched in March 2007.

## Purpose of the Project:

To prevent CHD through early identification and control of modifiable risk factors, promoting knowledge and skills on healthy lifestyle, balance diet and regular exercise.

## Methods:

General population without history of cardiovascular disease (CVD), were recruited in a CHD risk screening program and their 10-year risk for CVD were calculated using Framingham risk equation. Eligible participants were recommended for specific interventions including exercise training, dietary workshop, health education seminar or physician consultation as indicated.

## Results:

215 subjects, aged  $51.07 \pm 9.52$ , were recruited for the program, 62 (28.8%) of them were male. The prevalence of the modifiable CHD risk factors profile were analyzed and illustrated in Figure 1. The subjects' 10-year risks for CVD were also calculated, using the Framingham risk equation; 43.1% (n=25) and 12.1% (n=7) of the male subjects have moderate and high risk for CVD respectively, while 2.1% (n=3) of the female subjects have moderate risk for CVD and no female subject has high risk for CVD.

When comparing with the 2004 Hong Kong Cardiovascular Risk Factor Prevalence Survey-2, the cohort of this study has an increased prevalence in the risk factors for CVD, including obesity in men as well as hyperlipidaemia and hypertension in women. The effect of the interventions in our cardiac health promotion program will be further analyzed upon the completion of the project by 2009.

## Conclusions:

The prevalence of the modifiable CHD risk factors and the 10-year risk for CHD in the Hong Kong population are increasing, cardiac health promotion program that collaborate with the community partner is a feasible service model, that maybe useful to prevent CHD.

**Figure 1. Prevalence of the modifiable CHD risk factor**

Modifiable CHD Risk Factor		Prevalence Number (%)			Mean±S.D
		Male (n=62)	Female (n=153)	Overall (n=215)	
Hypertension	SBP	21 (33.9%)	50 (32.7%)	71 (33.0%)	127.62 ± 14.39
	DBP (mmHg)				76.48 ± 9.28
Diabetes Mellitus	FBS (mmol/L)	6 (9.7%)	6 (3.9%)	12 (5.6%)	5.17 ± 0.81
Hyperlipidaemia	LDL	43 (69.4%)	76 (49.7%)	119 (55.3%)	3.31 ± 0.87
	TG (mmol/L)				1.33 ± 0.77
Obesity	BMI (kg/m <sup>2</sup> )	33 (53.2%)	53 (34.6%)	86 (40.0%)	24.40 ± 3.38
Central Obesity	Waist (cm)	31 (50.0%)	80 (52.3%)	111 (51.6%)	83.16 ± 9.59
Lack of Exercise		39 (62.9%)	85 (55.6%)	124 (57.7%)	
Smoker		10 (16.1%)	5 (3.3%)	15 (7.0%)	

Hypertension=SBP>140mmHg or DBP>90mmHg; Impaired Fasting Glucose (ADA, 2007 standard)=Fasting Blood Sugar 5.6-6.9mmol/L; Diabetes Mellitus=FBS>7 mmol/L; Hyperlipidaemia=LDL>3.4 or TG>1.7; Overweight (WHO, Asian Standard)=BMI 23-25; Obesity=BMI>25; Central Obesity=Waist Circumference>90cm in Male or >80cm in Female; Lack of Exercise=less than 5 days of 30 minutes moderate intensity exercise or less than 3 days of 20 minutes vigorous intensity exercise or less than the required moderate and vigorous exercise at combination