A WORKSITE WELLNESS PROGRAM IN KUALA LUMPUR – BASELINE CHARACTERISTICS

FM Moy[a], MMedScPH, [a] AS Atiya, MPH. [a]

SUMMARY

A worksite wellness program was conducted on a group of high risk security guards in a public university in Kuala Lumpur. The study design was a quasi-experiment trial where a comparison group was used. The baseline results showed that both groups were comparable in the socio-demographic characteristics and biomedical measurements except the age and years of service, prevalence of overweight/obesity, total cholesterol and triglycerides level (p<0.05). Lifestyle behavior such as exercise and smoking were found to be significantly better in the comparison group (p<0.05). A Lifestyle Modification Program was designed to change the behavior of the subjects in the intervention group to reduce their risk of morbidity and mortality.

INTRODUCTION

Obesity and weight are important determinants of health and lead to adverse metabolic changes, including increases in blood pressure, unfavorable cholesterol levels and increased resistance to insulin. They raise the risks of coronary heart disease, stroke, diabetes mellitus, and many forms of cancer1. High blood pressure and high blood cholesterol are closely related to excessive consumption of fatty, sugary and salty food2. They become more lethal when combined with the deadly forces of tobacco and excessive alcohol consumption, which also cause a range of cancers as well as heart disease, stroke and other serious illnesses.

The cardiovascular diseases (CVDs), diabetes, obesity, cancers and respiratory diseases account for 59% of the 56.5 million deaths annually and 45.9% of the global burden of disease2. Five of the top 10 global disease burden risk factors identified by the World Health Report2 were obesity, high blood pressure, high cholesterol, alcohol and tobacco which independently and often in combination are the major causes of the above mentioned diseases. These diseases are not only common in the industrialized countries, but are now becoming more prevalent in developing nations, where they create a double burden in addition to the conquered infectious diseases that has always afflicted poorer countries2. This could be due to the unhealthy choices in the population's food consumption and activity patterns. These changing patterns are identified as important risk factors in the developing countries.

The morbidity and mortality data of our country, Malaysia, shows that the prevalence of chronic diseases such as diabetes mellitus, coronary heart diseases, hypertension etc seemed to be on the rising trend3. These figures coincide with the development of our country from a developing country to a more developed and affluent country.

Lifestyle behavior such as diet and physical activities as well as tobacco and alcohol consumption are major contributing factors to the increased morbidity and mortality rates of a country. Clinical trials and population studies have shown a potential in modification of lifestyle behaviors for prevention of chronic diseases. Trials in China4, Finland5 and United States of America6 showed that close to 60% of the type 2 diabetes cases could be prevented by changes in diet and physical activity. In the latter trial, the impact of these measures was double that of drug intervention6. Population studies in North Karelia, Finland had a reduction of 70% in coronary mortality rate among the 35 to 64-year old population in 25 years during a community-based and national program on changes of diet of the population7. The Republic of Korea due to maintaining its traditional high-vegetable diet despite major social and economic change has lower rates of obesity and chronic diseases than other industrialized countries with similar economic development8.