

UNIVERSITY OF PUBLIC HEALTH, YANGON

**EFFECTIVENESS OF A COMMUNITY BASED PREVENTION
PROGRAMME ON MAJOR NON COMMUNICABLE
DISEASES IN MINGALARDON TOWNSHIP, YANGON
REGION**

DR. SOE TUN

M.B.,B.S, M.Med.Sc (Public Health), M.S (Int'l Health)

**DOCTOR OF PHILOSOPHY
(PUBLIC HEALTH)**

2013

SUMMARY

Lifestyle factors have shown to be important in prevention and control of non-communicable diseases. There have been made some community based intervention studies about the effects of lifestyle interventions without community leaders involvement. In this study, the effect of lifestyle intervention in peri-urban among age 20-64 years respondents were described. The Stepwise Approach to Surveillance of Non-communicable disease risk factors survey was conducted. A total of 75 respondents was selected from 4300 villagers for lifestyle intervention. Twenty community leaders were selected for supervision of participants. Standard measurements were conducted before the intervention and 2-years later.

Fruits and vegetables consumption statistically significant increased from 6.34 servings to 8.6 servings ($P < 0.001$) and from 0.81 servings to 6 servings ($p < 0.001$) respectively. Metabolic Equivalent of Task (MET) of hard working per week increased from 460 to 700 ($p < 0.001$), MET of less serious work increased from 456.75 to 629.26 ($p < 0.001$), MET of less vigorous exercise increased from 334 to 514 and MET of walking/bicycling increased from 108.39 to 141.75 ($p = 0.001$). Mean of sitting and lying was slightly decreased from 2.97 hours to 2.2 hours ($p < 0.001$) but less vigorous exercise was significantly increased from 1.75 hours to 2.4 hours ($p = 0.399$). The percentage of those who are smoking currently decreased from 14.7% to 5.33% ($P < 0.05$) and also alcohol drinking was also decreased from 14.7% to 8% after intervention ($P = 0.063$). BMI was significantly decreased from 23.73 to 22.55 ($P < 0.001$) and hip ratio decreased from 0.87 to 0.821. Systolic blood pressure decreased from 119 mmHg to 113 mmHg ($p = 0.001$). Diastolic blood pressure decreased from 78 mmHg to 73 mmHg ($P = 0.001$). However fasting blood glucose was not statistically significant reduced between before and after intervention. Total cholesterol is significantly decreased from 206.57 mmol/L to 186.45 mmol/L ($P < 0.001$) and Triglyceride ratio decreased from 172.35 mmol/L to 148.14 mmol/L. HDL was increased from 55.77 mmol/L to 58.42 mmol/L ($P = 0.013$). LDL also decreased from 116.32 to 114.68 but is not statistically different ($P = 0.702$).

The community-based intervention programme successfully reduced some of the risk factors and improved healthy lifestyle habit. The results suggest that the NCDs may be delayed or prevented and its course changed for improved outcomes among vulnerable population.