

The Prevalence of Dyslipidemia and Development of a Health Promotion Plan in 8798 Taiwanese elderly Citizens

ABSTRACT

Objective

Dyslipidemia is related to atherosclerosis, and the development of cardiovascular diseases. The health promotion plan helps maintain diet control and appropriate exercise, thus reducing dyslipidemia related health hazards. We aimed to investigate the prevalence of dyslipidemia in Taiwanese people aged over 65 years. According to the statistical results, the corresponding healthy promotion plan of controlling dyslipidemia was established as a reference for elderly health care services.

Material and Methods

This study enrolled 8798 Taiwanese elderly citizens possessing the healthy examination during 2014 to 2016. Serum total cholesterol, triglyceride, high density lipoprotein cholesterol and low density lipoprotein cholesterol levels were measured. Dyslipidemia was defined as one of the three detected values of total cholesterol, triglyceride and high density lipoprotein cholesterol was over the standard index. The prevalence of dyslipidemia and associated factors were analyzed using the Minitab v.17 software, further the corresponding healthy promotion plan of controlling dyslipidemia was established.

Results

The mean age of the 8798 Taiwanese elderly citizens was 72.7 ± 0.1 years. Dyslipidemia was identified in 4266 (48.5%) of the 8798 elderly citizens, in which 46.3%, 9.0%, 10.3% and 34.4% had total cholesterol, triglyceride, high density lipoprotein cholesterol and low density lipoprotein cholesterol abnormality, respectively. Hyperlipidemia was identified abnormality, which account for 48.1% of the samples. Further ANOVA analysis also demonstrated that the factors such as blood glucose, GOT, GPT, and serum creatinine were significantly associated with dyslipidemia.

Conclusions

Near half of the elderly citizens in Taiwan are at risk of dyslipidemia. Developing a proper health promotion plan for elderly citizens is necessary to control the risk of dyslipidemia and reduce the related health hazards. The result of this study can be using as a reference for elderly health care services.