

Impact of a Health Promoting Lifestyle Education Intervention on Cardiovascular Disease Risk Indicators in Postmenopausal Women

N Rathnayake^{1#}, G Alwis², J Lenora³ and S Lekamwasam⁴

¹Department of Nursing, Faculty of Allied Health Sciences, University of Ruhuna, Sri Lanka

²Department of Anatomy, Faculty of Medicine, University of Ruhuna, Sri Lanka

³Department of Physiology, Faculty of Medicine, University of Ruhuna, Sri Lanka

⁴Department of Medicine, Faculty of Medicine University of Ruhuna, Sri Lanka

#nirmala.priyanthi@gmail.com

Regular training for healthy lifestyle with planned education programs are imperative to empower the health status of postmenopausal women (PMW). This study was designed to evaluate the impact of a health-promoting-lifestyle-education-intervention (HPLEI) on cardiovascular-disease-risk-indicators (CVDRI) in a group of PMW. A quasi-experimental study was conducted with randomly selected, 72 PMW from two geographically separated areas in Galle, Sri Lanka, allocated as experimental-group (EG) (n = 37) and control-group (CG) (n = 35). HPLEI focused on postmenopausal health management was performed only for the EG during a 8-week period and a printed health education package was provided. Both groups were followed-up for a 6-month period after the 8-weeks programme. CVDRI [systolic-blood-pressure (SBP), diastolic-blood-pressure (DBP), fasting-blood-sugar (FBS), total-cholesterol (TC) and triglycerides were evaluated before the intervention (base line) and after a 6-month follow-up. Data were analyzed with SPSS 20 using independent-sample-t-test and paired-sample-t-test. Ethical clearance for the study was obtained from Ethics Review Committee, Faculty of Medicine, University of Ruhuna. Mean (SD) ages of EG and CG were 54.6 (4.5) and 56.5 (3.4) years respectively ($p = 0.06$). Sociodemographic status of the two groups ($p > 0.05$) was not different ($p > 0.05$). CVDRI in EG were not different from those in CG ($p > 0.05$) at the baseline. In the EG SBP, DBP, FBS ($p < 0.05$), TC and triglycerides ($p > 0.05$) showed a reduction at the follow-up evaluation. In the CG SBP, DBP ($p < 0.05$), FBS and TC ($p > 0.05$) were increased, and triglycerides ($p = 0.06$) were reduced in the same evaluation. Between group comparison at the end of the 6-month follow-up showed a reduction in DBP ($p < 0.04$) and FBS ($p < 0.001$) in EG compared to CG. The study proved that the HPLEI performed for PMW was effective in improving CVDRI after menopause.

Keywords: Cardiovascular disease, Risk indicators, Health promoting lifestyle, Education, Postmenopausal women