Effects of arm swing exercise program on nutritional status in female older adults at risk for metabolic syndrome

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This quasi-experimental research with one-group self-control design aimed to investigate effects of arm swing exercise program on Body Mass Index (BMI) and Waist Circumference (WC) in female older adults at risk of metabolic syndrome. Sample included 55 female older adults with excessive WC, residing in an urban community in Bangkok. Data were collected using questionnaire and nutritional assessment at baseline, before (4-week control period) and after the program (4-week experimental period). Data were analyzed using descriptive statistics, One-way ANOVA with repeated measures and multiple comparisons. Results revealed that after the program, mean BMI of the sample (27.0±3.2 kg./m$^2$) was less than the baseline (27.3±3.2 kg/m$^2$) and before the program (27.4±3.3 kg/m$^2$) with statistical significance (F=31.296, p<0.001). The mean WC (93.6±8.9 cm) was less than the baseline (94.6±9.2 cm) and after the program (94.7±9.2 cm) with statistical significance (F=18.645, p<0.001). The results indicated that the arm swing exercise program was effective in reducing BMI and WC in female older adults. Community nurse practitioners and health team could apply the program for health promotion in female older adults residing in communities.

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