

系所組別： 體育健康與休閒研究所甲組

考試科目： 運動健康促進概論

考試日期：0225，節次：3

1. 請說明 Health fitness standards 和 Physical fitness standards 之間的差異。(20%)
2. 請說明運動、女性生理週期(停經前和停經後)與 osteoporosis 三者的關係。(20%)
3. 運動體能的六大要素為何？如何評估。(30%)
4. 請簡要描述以下英文期刊中的題目與摘要內容。(30%)

**Effectiveness of motivational interviewing and physical activity on prescription on leisure exercise time in subjects suffering from mild to moderate hypertension.**

Sjöling M, Lundberg K, Englund E, Westman A, Jong MC.

BMC Res Notes. 2011 Sep 12;4:352.

Department of Health Sciences, Mid Sweden University, Sundsvall, Sweden.

**Abstract:**

**BACKGROUND:** Physical inactivity is considered to be the strongest individual risk factor for poor health in Sweden. It has been shown that increased physical activity can reduce hypertension and the risk of developing cardiovascular diseases. The objective of the present pilot study was to investigate whether a combination of Motivational Interviewing (MI) and Physical Activity on Prescription (PAP) would increase leisure exercise time and subsequently improve health-related variables. **METHODS:** This pilot study was of a repeated measures design, with a 15 months intervention in 31 patients with mild to moderate hypertension. Primary outcome parameter was leisure exercise time and secondary outcome parameters were changes in blood pressure, Body Mass Index (BMI), waist circumference, lipid status, glycosylated haemoglobin (HbA1c) and maximal oxygen uptake (VO<sub>2</sub> max). Assessments of the outcome parameters were made at baseline and after 3, 9 and 15 months. **RESULTS:** Leisure exercise time improved significantly from < 60 min/week at baseline to a mean activity level of 300 (± 165) minutes/week at 15 months follow up. Furthermore, statistically significant improvements ( $p < 0.05$ ) were observed in systolic ( $-14.5 \pm 8.3$  mmHg) and diastolic blood pressure ( $-5.1 \pm 5.8$  mmHg), heart rate ( $-4.9 \pm 8.7$  beats/min, weight ( $-1.2 \pm 3.4$  kg) BMI  $-0.6 \pm 1.2$  kg/m<sup>2</sup>), waist circumference ( $-3.5 \pm 4.1$  cm) as well as in VO<sub>2</sub> max ( $2.94 \pm 3.8$  ml/kg and  $0.23, \pm 0.34$  lit/min) upon intervention as compared to baseline. **CONCLUSIONS:** A 15 month intervention period with MI, in combination with PAP, significantly increased leisure exercise time and improved health-related variables in hypertensive patients. This outcome warrants further research to investigate the efficacy of MI and PAP in the treatment of mild to moderate hypertension. (內容引用自 <http://www.ncbi.nlm.nih.gov/pubmed/21906404>)