## Impact of theory based educational intervention on knowledge, belief and self-efficacy regarding osteoporosis among the female staff in Selangor, Malaysia: research concept, framework and methodology

## **ABSTRACT**

Background: Osteoporosis is a global health problem along with heart disease, stroke, diabetes and cancer which not only causes increase economic burden, it also leads to physical mental and social sufferings. It is considered as woman's chronic health problem which is characterized by decreased bone mass density, micro architectural deterioration of bone tissue and fragility fractures, particularly to the hip, spine, wrist and shoulder. It is a silent undiagnosed disease until a fracture occurs due to an accidental fall. Even though it could affect both gender, 80% of those affected are women. Worldwide, 1 in 3 women over age 50 will affected by osteoporotic fractures, as will 1 in 5 men aged over 50. Objective: To develop, implement and evaluate effectiveness of an educational intervention program on prevention of Osteoporosis based Health Belief Model among the female staff in Universiti Putra Malaysia. Methodology: Single blinded, Cluster Randomized Control Trial will be conducted among female staff in Universiti Putra Malaysia as full time. After cluster sampling, total 240 samples will be allocated in intervention and control group who will expose to educational module and follow up for three months to measure the outcomes. The intervention group will give prevention of osteoporosis knowledge based on Health Belief Model and the control group will in wait list. The data will analyse by computer software SPSS version 22 and the descriptive statistics, paired t test, repeated measure ANOVA, chi square, general linear model will do to measures the outcome. Results from this study about knowledge, belief and self-efficacy regarding osteoporosis among the female staff will help to identify areas that need focus and enforcement.

**Keyword:** Osteoporosis; Health belief model; Intervention study; Female