

# **Effectiveness of safe patient handling intervention on musculoskeletal disorder among government nurses in elderly care homes West Coast Malaysia: study protocol**

## **ABSTRACT**

**Background:** Health care worker are susceptible to develop musculoskeletal disorder (MSD). Nurses in nursing home setting exposed with physical and psychological stressors and they are prone to develop MSD due to these conditions (Simon et al., 2008). Manual handling while handling elderly patient involved awkward posture which lead to MSD among nurses. Therefore safe patient handling intervention is important in reducing prevalence of MSD among nurses.

**Materials and Methods:** The cluster pre-test and post-test with control group quasi experimental study will be done involving 8 government elderly care homes in West Coast Malaysia. Total 256 nurses and assistant nurses will be involved in this study. Four home care will be in the intervention group. While another 4 home care will be in the control group. Safe patient handling intervention program will be conducted. During health education, health belief model theory will be used to increase the knowledge and subsequently change the practice to safe patient handling.

**Result:** Prior to intervention program, module intervention and health education material will be developed. The health education and training will be given according to module provided. Outcome measurements are musculoskeletal disorder, knowledge and practice of safe patient handling. These outcomes will be measured through self-administered questionnaires. Data will be analysed using SPSS version 22. To measure the association, Chi-square test, Mann Whitney U test, independent t test, dependent t test and Wilcoxon signed rank test will be used and for multivariate analysis, the Generalized Estimating Equation (GEE) will be used.

**Conclusion:** Health education on safe patient handling is important in order to reduce the MSD among nurses in elderly care homes.

**Keyword:** Safe patient handling intervention; Musculoskeletal disorder; Nurses; Elderly care home

