PREVENTING FALL INJURIES AMONG ELDERLY BY SHOCK ABSORBING FLOORING

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Background. Within nursing homes, the fall-related fracture incidence rate is between 5 and 10 %. For those living in nursing homes there are limited options for active fall injury prevention, due to physical impairments and diseases. Instead, passive fall injury prevention is a more realistic alternative. Shock absorbing flooring has been suggested as a potential passive safety measure for this group of individuals. **Aims/Objectives/Purpose.** To evaluate the fall injury reducing effect of shock absorbing flooring in a nursing home setting in Sunne, Sweden. **Methods.** The study is case controlled, with the shock absorbing flooring installed on one ward with a maximum of 12 residents and the other 5 wards are controls. The total number of residents including control wards is approximately 60. Baseline measurements are made with estimates of the risk of falling as well as the risk of fall-related injury. **Results/Outcome.** After one year, there has been 22 falls on the shock absorbing flooring, with no resulting injury compared to 130 falls and 4 fractures on the control wards. An unexpected finding is that the acoustic environment has improved considerably, creating a calmer environment for the elderly. **Significance/Contribution to the field.** To our knowledge, this is the first time a shock absorbing flooring has been tested and evaluated as a means of injury prevention in a nursing home. Although this is a pilot study, it contributes towards improved passive safety for this frail group of elderly.