Evaluation of EUNESE Pilot project 4: Virtual modeling of a safe household environment for elderly citizens

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Background: The evaluation component of pilot project 4 was to assess the effectiveness of the newly developed materials in assisting health care professionals working with independently living elderly to improve their awareness and practices on home safety.

Methods: A single-group evaluation design before and after a short intervention with pre- and post-tests of knowledge and willingness to incorporate home safety modification principles in their daily contact with elderly were applied and a short training intervention was provisioned. Objectives of the evaluation process were to assess (a) the quality of the virtual modelling materials, (b) its perceived usefulness for building capacity of professionals to provide advice on home injury prevention and (c) its effect on increasing participants' awareness and knowledge regarding the magnitude of the problem and requirements for home safety modifications. Twenty-five health professionals from 13 Day Care Centres for Elderly participated.

The training process started with completion of the pre-questionnaire, comprising four domains that was followed by the presentation of the material and interactive discussion. The intervention comprised a 4-hour training course with presentation of: a 3dimensional visual plot using a walk-through exploration of the interior of a house; a Glossary, containing an A to Z guide for home-safety with easy to follow sketches; a leaflet containing safety tips for elderly safety. Finally, the post-questionnaires were completed and the data were analyzed through simple frequency distributions.

Results: Pre-intervention knowledge on the magnitude of injuries in this motivated group was already high; due to the ceiling effect the expected improvement was rather limited. On the contrary, knowledge of simple modification measures improved significantly after the intervention and so did their willingness to recommend these measures to independently living elderly. The quality of materials was highly scored (mean >5.0 out a max=6) in all instances.

Comments: Motivated health professionals working with elderly in Greece express their needs for more formal training in practical issues related to home safety modifications. Health care professionals are optimists that elderly in Greece are highly likely to benefit from a similar intervention given that the training will be adjusted to the seniors' needs.