

A research of everyday technology of elderly people with dementia

Kazue Noda¹, Rumi Tanemura¹, Toru Nagao¹, Peter Bontje¹, Jiro Sagara², Osamu Nakata¹, Louise Nygård³, Lena Borell³

¹Kobe university, Graduate School of Health Sciences, Kobe, Japan, ²Kobe design university, Kobe, Japan, ³Karolinska Institutet, Huddinge, Sweden

Introduction: We enjoy convenient, comfortable lives with using everyday technology (ET). But ETs may be complex to operate and require high level functions that may be impaired in elderly people, particularly those with dementia. Persons with cognitive disorders may encounter danger when they use ETs in erroneous ways and may be inconvenienced when they cannot use ETs. The purposes of this research was to describe the use of ETs by elderly people with mild dementia and how it impacts daily live in their home. We reason that this knowledge is valuable to better support them in using ETs.

Informants: 5 elderly Japanese persons (age: 75-82, MMSE 4-25). They were living alone or were alone during day-time. Diagnosis: Alzheimer (2), Levy Body Dementia (1), and 2 were not diagnosed.

Methods: We interviewed and observed them in combination with administration of the Everyday Technology Use Questionnaire (ETUQ), Japanese version. The Japanese version includes unique items, such as rice-cooker and kotatsu. Family was present and their views were included. Demonstration of use of ETs were video recorded. We also evaluated FAI, GDS, MMSE.

Results: These older people were living at ease in their homes and having their way of living respected. They could phone family using memo's pinned to the wall or recalled phone-numbers from memory. However, one informant was admonished by family not to phone. Them being able to phone family appeared indispensable to them living alone or being alone during day-time. They could boil water with electric kettle and have tea frequently. They managed the use of ETs that they were familiar with since long ago. They cherished them, because these elders could not use new ETs. Turning dial switches was easier than other switches. There were some ETs too difficult to use with two main causes being: unable to insert plug and unable to modify their erroneous operations. Family introduced inventions enabling them to continue using ETs.

Conclusion: The findings suggest ETs easy to use for elderly people should be introduced from an early period and ideas were gained about easing ETs' operations.