U. ENDE, A. SIGMUND. ***An occupational therapeutic perspective about the usage of multimedia technologies in support of dementia****. Gerontechnology 2014;13(2):195;* doi:10.4017/gt.2014.13.02.015.00 **Purpose** This study used a multimedia technology, which was developed to allow people with dementia to be independent within their own living environment[1]. The technology offers the following functions: a calendar with a daily schedule, the possibilities to read the news, listen to the radio, view photos, and the opportunity to contact a person. The goal of this study was to understand the potential for this technology from an occupational point of view and to research how much support the technology could possibly provide to people suffering from dementia. The preliminary findings could then be utilized to develop future multimedia technologies for dementia sufferers in such a way that daily occupational therapy goals are integrated and to achieve individual and resource-oriented support. Therefore the following research question was asked: What kind of support does the technology offer to people diagnosed with dementia at an early stage? **Method** A qualitative study design was chosen to answer the research question. Nine occupational therapists (n=9) in the position of therapy experts were asked to state their opinions. Data collection was made via focused single and group interviews. In advance of the interviews, data, photos, radio stations, and newspapers were computerized to illustrate the opportunities of the software to the occupational therapists. To analyze the data the software tool Maxqda 11 was used, serving as a device for computer-assisted and qualitative analysis of data and text. With the help of the software tool, the collected data were structured and organized. Dementia sufferers already exhibited the early stage cognitive decline in their competencies for orientation, short-term memory, performance of IADLs and ADLs, as well as changes in personality. Targeting the loss of mental capacity is the focus to formulate occupational therapy treatment goals for the patient. Therefore the following hypotheses were developed: (i) Multimedia technology is able to compensate for impairments of short-term memory; and (ii) Multimedia technology is able to support temporal orientation. (iii) A third hypothesis was developed to verify whether the technology could be adapted to the individual needs and abilities of dementia sufferers: the technology is user-friendly. **Results & Discussion** The results of the three hypotheses: (i) All occupational therapists expressed that the technology provides an overview of the day of the week, the actual date and the time. (ii) The technology is able to support temporal orientation because of the daily schedule. (iii) The technology does not offer any further adaptions that would support the individual abilities of dementia sufferers experiencing a performance decline. The success of assistive technologies especially depends on the concern whether the needs, wishes and demands of the user are observed[2,3]. From the viewpoint of occupational therapists, it is conceivable to take account of the needs of a person with dementia. According to the study results, the implementation of assistive technologies for people with dementia should run through the following client-centred implementation cycle: (i) Analysis of needs, abilities, and clients' goals; (ii) Individual setting: based on the results of the assessments an individual adjustment and adaption would be possible which would support the acceptance of the technology; (iii) Instruction and training: at first an instruction in assistive technology should pursue the goal to create assurance in handling, motivate for application and reduce aversion of the device. Even if the person with dementia is well acquainted with the usage of the technology, there should still be an assurance of continuous support and care for the patient during the entire service. According to this, the needs and wishes have to be analysed once more to adapt the technology.

References

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