Does assistive technology support everyday life for younger persons with dementia and family carers?

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Background

Part of Norwegian program on Younger people with dementia 2009-2011

Funded by the Norwegian Health Directorate

Twelve participants with a family carer were recruited from four Memory Clinics

Project participation 2.5 – 19 months
The aim of this study was to explore what characterizes the implementation process when the A T was experienced beneficial for the YPD and the family carer in their everyday life.
Method

1. Qualitative longitudinal study
2. 12 younger persons (i.e. those under 65 years of age) recently diagnosed with dementia and their family carers.
3. The families explored the use of different assistive technologies
4. In-depth interviews with YPD and carer, videotaped observation of YPD using ATs were conducted at the beginning and repeatedly every 3rd month up to nineteen months. Both YPD and their carers participated in the interviews.
5. The data were initially thematically analysed and systematised by using NVivo, followed by an phenomenological hermeneutic analysis approach.
6. The participants' experiences were further discussed on the basis of embodied, social- and everyday life- situated approaches to provide a deeper understanding of interactive processes involved in the trajectory.
# Devices in the project

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<tr>
<th>Safety &amp; security</th>
<th>Simple user interface</th>
<th>Visible information</th>
<th>Verbal reminders</th>
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<tbody>
<tr>
<td>Sensors, localization</td>
<td>Compensation</td>
<td>Visual strategies</td>
<td>Auditive strategies</td>
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<td>Stove timer</td>
<td>Automatic day &amp; night calendar</td>
<td>White board</td>
<td>Speaking watch</td>
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<td>Timer</td>
<td>Simple remote TV control (2 types)</td>
<td>Digital calendar (Memoplanner)</td>
<td>Message box</td>
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<td>GPS</td>
<td>Electronic door lock</td>
<td>Labelling (contrast colour)</td>
<td>Speaking reminder</td>
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<td></td>
<td>Item locator</td>
<td>Automatic calendar (day &amp; date)</td>
<td>Memory clock (Memo)</td>
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<td></td>
<td>Simple mobile phone (2 types)</td>
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<td>Medicine dispenser with alarm</td>
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</table>
Results

Five elements in the process were identified as important for the experience of usefulness and successful incorporation of AT.

1. Be valuable by addressing practical, emotional and relational challenges
2. Fit well into or be a better solution habitual practice and established strategies
3. Generate positive emotions and become a reliable and trustworthy tool
4. Be user-friendly, adaptable and manageable
5. Interest and engage the family carer
1 Be valuable by addressing practical, emotional and relational challenges

- AT addressed different needs for YPD and family carer.

- The YPD and family carers’ need became visible through the implementation process
2 Fit well into or be a better solution habitual practice and established strategies

- The significance of habitual practice.
- Old patterns of habits and established strategies are stronger.
3 Generate positive emotions and become a reliable and trustworthy tool

- Establish trust and reliability
- The AT generate different emotions through the process
4 Be user-friendly, adaptable and manageable

- Characteristics and user-friendliness
- YPD capacity, the feeling of mastery and the complexity of technology
5 Interest and engage the family carer

- Give information about AT
- Needs assessment
- Value their perspectives
- Suggest AT for exploration
- Cooperate on implementation plan
- Adapt training for users
- Follow up, give support and evaluate
Characteristics of the implementation process for the AT to become experienced as beneficial

1. Experienced as valuable; address practical, emotional or relational changes in everyday life.
2. The new technology has to fit in with, or be easily incorporated into, family life routines.
3. Established as habitual practice, on basis of our lived, bodily, practical and social everyday life.
4. Generate positive feelings of joy, mastery, trust, experience of being in control, and safety.
5. Be aware that negative emotions like hopelessness, irritability, restless, defeat or guilt strongly influence.
6. The AT’s potential to be adjusted to the cognitive capacity of the YPD, and to individual needs and preferences when it was already in use were key components for its successful incorporation.
7. Interest and engage YPD and carer.
Publications


References


