person-centred technology for persons with dementia

Susanne Murphy, MSc, OT Reg.(Ont.)
Lecturer,
Occupational Therapy Program
School of Rehabilitation Therapy
Faculty of Health Sciences
Queen’s University

learning objectives

• By the end of this presentation participants will be able to:
  – state how the ‘fit’ of technology will influence use of technology for individuals with dementia;
  – describe at least one environmental adaptation and one technology solution that might be used for individuals with dementia; and
  – state at least one limitation to implementing technology for individuals with dementia.
dementia

classification of technologies

- promote safety
- foster communication
- provide multisensory stimulation
- memory enhancers
interventions

• Care and treatment happens at different levels:
  – person
  – environment
  – occupation

(Law, Cooper, Strong, Stewart, Rigby, Letts, 1996; Conway, 2008)

technology and ‘fit’

• person centred response
  – technology must meet the needs of the person
  – support current occupations
  – be able to change (the technology...not the person)
  – must involve the person/caregiver(s) in the complete process
  – technology must take into account the impact upon the home environment and how the individual will interact in the environment
  – should not make occupations more difficult
technology and assessment process

elements of change

- basic environment
- simple technology
- advanced technology
basic environmental adaptations

- use colour contrast to accommodate for visual or perceptual changes
- consider the use of grab bars and/or handrails to increase safety
- minimize clutter
- remove visual distractions/glare
- keep surroundings familiar (only change what needs changing)
- use labels or signs

basic environmental adaptations

- low contrast
- high contrast
simple technology

- Hot water tank mixing valve
- Reminder devices, key locators, clocks, timers and/or night lights with sensors
- Entrance sensor lights
- Magnetic locks / appliance locks
- Receptacle covers
- Pressure sensitive plugs
- Sound and movement monitors
- Simplified and/or universal remotes
- Picture phones
- Digital photo frames
- Electronic medication reminders
- “talking label”

simple technology adaptation
advanced technology

- Automated home systems
- Emergency response systems / personal alarms / medical monitoring
- Bed alarms / sensors
- Flood detectors
- Video monitoring with live web streaming
- Induction utensils
- Property exit sensors
- Computers for voice over internet protocol (VOIP)

advanced technology adaptations

emerging technology

limitations to the implementation of technology

• Cost
• Ethics
• Social / cultural forces
• How the individual experiences the technology and the meaning attached to it
review of literature


interested partners
your thoughts....

Community, not technology, is what people with dementia need

ANDRE PICARD | Columnist profile | E-mail
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resources

- medical vendors in your area
- Alzheimer Society of Canada
- Alzheimer’s Disease Education and Referral (ADEAR) (USA)
  - [http://www.nia.nih.gov/Alzheimers/Publications/CaringAD/caregiving/keeping.htm]
- Alzheimer’s Association (USA)
  - [http://www.alz.org/professionals_and_researchers_everyday_technologies_for_alzheimer_care.asp]
- Intelligent Assistive Technology and Systems Lab (IATSL), located in the Department of Occupational Science and Occupational Therapy at the University of Toronto. [http://www.ot.utoronto.ca/iatsl/projects.htm]
- Knowledge Media Design Institute (KMDI), University of Toronto. [http://www.kmdi.utoronto.ca/]
- Living with dementia: How the environment, technology and you can help
  - [http://www.dementiotechnology.org.au/]
- at Dementia – information on assistive technology for people with dementia
  - [http://www.adementia.org.uk/editorial.asp/page_id=161]
references


