

USING ROBOT COMPANIONS WITH PEOPLE WITH DEMENTIA

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The beginning

- Based in Sheffield on a Dementia Assessment unit
- Interest in non-pharmacological interventions
- Training in Denmark to ensure ethical deployment
- Involvement in research project in collaboration with Sheffield University, evaluating the reactions of people with Dementia to the Paroseal.
- SHSC purchased two seal robots

Animal Assisted Therapy

- Pet Therapy is a recognised intervention
- Benefits
 - studies show:
 - significant decrease in distressed behaviour
 - Increased social interaction
 - Reduction in loneliness
 - Richardson (2003), Banks (2001)
- Disadvantages
 - Cost
 - Dislike of animals
 - Fear/ negative experience
 - Infection control

Doll Therapy

- Used with people who experience agitation, social withdrawal and communication difficulties.
- There is support for use of dolls in Dementia care but evidence is mainly anecdotal. (Mckenzie 2006)
- Ethical concerns
 - Demeaning
 - Deceitful
 - Infantilising (Cayton 2006)
 - Difficulty disengaging (Mckenzie 2006)

Robotic Companions

- Robotic animals are now emerging as a positive alternative to real pets and older people are gaining the same benefits. (Banks 2008)
- Paroseal was originally designed by Dr Takinori Shibata for use with the increasing elderly population in Japan.
- Why use a baby harp seal ?
- It has sensors to interpret its environment.
- When a person interacts it interprets meaning and generates behaviour in response.
- It will call out if left untouched
- Cry if handled harshly
- Respond to touch speed and light

Considerations

- Hygiene
- Size
- Noise
- Colour

Tom Kitwood's flower of need



Implementation

- Caution
- Selected a person settled but withdrawn.
- No risk to the seal.
- Observed intervention to 'unlock' her
- Mood lifted and communication increased
- Presented us with her wedding photograph

Connectedness

- Paro:
- Increases experience of socialization
- Creates novel shared experiences between two people.
- Attracts attention resulting in group interactions.
- Enables discussion and reminiscence
- Supports the expression of non verbal communication.

Play

- In many ways play is the ideal vehicle for opening the many closed doors experienced when living with Dementia. It provides all of us with permission to leave behind the rational, planned and cognitive and embrace the creative, spontaneous and relational aspects of life. (Killick 2013)

Lila

- The Sanskrit word for play
- Also means
- 'Delight and enjoyment of this moment'

Ken exploring his playful side with Paro



Bernie making a connection with Paro



Patients responses

- Male patients tended to adopt a playful approach.
- Manipulating the seal like a baby or toddler.
- Communicating with song and animal sounds.
- Reference to bodily functions resulted in shared humour.

Distraction

- Don was initially a very distressed person who constantly mobilised around the ward asking for bus fare looking for exits so he could return to his mother. He showed high levels of ill being requiring constant reassurance.
- Using Paro enabled Don to sit peacefully for periods of up to an hour. His attention directed fully on the seal.
- Benefitting from the sensory and interactive experience.
- “Aren’t you lovely and you are doing really well”
- Praising the seal seemed to reassure Don.

“I shall not forget the morning I saw him with the electronic seal. He looked so content. I shall keep the photograph and copy it for each of our daughters”



Complications

- Two patients who initially had positive interactions with Paro. Were then unable to differentiate between the seal and their own pets.
- One because Paro could not perform like her dog.
- “Why won’t he walk what's wrong with him?”
- Another patient became distressed shortly after disengaging with Paro.
- Perceiving he had lost his own dog and would be in serious trouble.

Clinical Application

- Paro is currently being used to stimulate one individual.
- She has deteriorated significantly both cognitively and physically.
- However she stills gains pleasure from the sensory experiences of Paro
- She wakes on hearing Paro and is encouraged to touch the seal.
- This enables her to be alert enough to take diet, fluids and medication.

Role Creation



“It’s ok it’s me Maud, I’m here you’re alright now”.

- Maud was a very sociable person who took great pride in the fact she had raised her grandchildren and ran a series of youth clubs.
- Received a commendation from the Lord Mayor of London for her youth work.
- Later became a collector/hoarder
- Distress resulted from being separated from her home and possessions and losing her sense of identity.
- Paro satiates Maud's need to nurture and care for someone.
- The seal is so effective that it brings instant relief when presented to her.
- Paroseal intervention is include in Maud’s care plan

“He can change his eye lashes and makes things different. I think he’s beautiful, he gets you and looks at you”



- Questions please ?