Social interactions and dementia: an observational study

Jean-Bernard Mabire, Marie-Claire Gay, Coralie Octave-Rolland, Catherine Garitte, Myrra Vernooij-Dassen
Introduction

- Efficient communication is central to the development and the maintenance of social interactions.

- In the context of dementia, social interactions are impaired because of the nature of the disease.
Introduction

Most studies focus on social interactions between people with dementia and the caregivers or on people’s activities (MacDonald & al, 1985; Kitwood & Bredin, 1992; Dean & al, 1993; Bowie & Moutain, 1993; Innes & Surr, 2001).

→ Little information about the nature of social interactions between people with dementia.

→ in nursing home?
Introduction

- People with dementia:
  - still want to have social interactions with others (Ward and al, 2008; Rousseaux and al, 2010).
  - develop social ties with others in institutions (Saunders and al, 2011).
  - speak and interact about objects and people present in their care units (Saunders and al, 2011).
Research questions

- How do residents with dementia interact with each other?
  - How do residents with moderate dementia communicate, verbally and non-verbally?
    - When they meet for the first time?
      => Direct observation is the most appropriate assessment method to analyze social behaviours.
Method: participants

- 36 volunteer residents

  - Inclusion and exclusion criteria

  - Paired according to their age, gender, socio-educational level and severity of the disease.

  - Randomly assigned to one of nine groups of six residents.
Method: sample characteristics

- Diagnostic hypothesis: 75% of Alzheimer’s Disease
- Age: 88.56 years old (SD: 6.01)
- Gender: 88.9% of women
- Length of institutionalisation: 3.58 years (3.10)
- Socio-educational level: 55.6% at primary school level
- Marital status: 72.2% widowed
Method: sample characteristics

- Cognitive status (MMSE; Folstein et al, 1975)
  - mean score = 13.69 (3.75)
- Functional abilities (IADL; Lawton and Brody, 1969)
  - mean score = 3 (1.85)
- Depression (CSDD; Alexopoulos and al, 1988)
  - mean score = 3.25 (3.93)
- Behavioural disorders (NPI 10 items; Cummings and al, 1994)
  - mean score = 5.03 (6.38)

No difference between any of the groups regarding these variables
Method: direct observation

- Origins
  → ethology
  → developmental psychology

- Interest in dementia study field?

- Observation tool
  → ethogram of observation
Method: direct observation

- Construction of an ethogram to analyze social behaviours
  - in terms of self-centred behaviours and social interactions of the residents.
  - in terms of frequency of occurrence.
- Behavioural patterns were recorded by two cameras and analyzed by two raters.
- A score of agreement was calculated.
  - mean score of agreement: 78% (SD: 7.5).
Method: Overview of the meeting place

R = residents and C = caregivers
Method: direct observation

- Composition of the observation grid

- 3 groups of behaviours
  - Self-centred behaviours: 9 categories and 47 behaviours
    - ex: Look → at oneself, vacant or outside
  - Social interactions: 5 categories and 39 behaviours
    - ex: Look → look at others or mutual look
      - Verbal interactions → Speak, ask, answer
  - « unclassifiable »
Method: Overview of the grid

<table>
<thead>
<tr>
<th>Self-centred behaviours</th>
<th>Social interactions (residents or caregivers)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Look</strong></td>
<td></td>
</tr>
<tr>
<td>At oneself</td>
<td>At others</td>
</tr>
<tr>
<td>Vacant</td>
<td>Reciprocal/Mutual</td>
</tr>
<tr>
<td>Outside / at an object</td>
<td>Look</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Facial expressions</strong></td>
<td><strong>Verbal interactions</strong></td>
</tr>
<tr>
<td>Positive</td>
<td>Positive</td>
</tr>
<tr>
<td>Smile</td>
<td>Speak to others</td>
</tr>
<tr>
<td>Laugh</td>
<td>Ask for something</td>
</tr>
<tr>
<td>Surprise</td>
<td>Answer someone</td>
</tr>
<tr>
<td>Negative</td>
<td>Negative</td>
</tr>
<tr>
<td>Make Faces</td>
<td>Shout at others</td>
</tr>
<tr>
<td>Frown</td>
<td>Insult someone</td>
</tr>
</tbody>
</table>
Results

- 2038 behaviours were observed.
- No difference in terms of number of behaviours according to the severity of dementia.
  - → 47.65% are self-centred
  
  -> 49.36% are social interactions
  - 34.69% between residents
  - 14.67% between residents and caregivers.

- → 2.99% are « unclassifiable »
Results

- Principal Component Analysis (PCA)
- **Component 1**: social interactions with caregivers
- **Component 2**: social interactions with residents
- **Component 3**: refusal to interact with other residents and withdrawal
- **Component 4**: not looking to engage in interaction and awareness of others.
- **Component 5**: inactivity and waiting
Results

Some behaviour have not been observed

- Negative understandable and non understandable self-centred verbalizations
- Some stereotypical behaviours
- Negative verbal interactions directed to others
- Intimacy behaviours
- Negative interactive behaviours

⇒ probably due to the fact that residents do not know each other and that the place of the meeting is unfamiliar.

⇒ But it also shows some adaptation capacities to a new situation.
Residents with dementia spontaneously engage in social interactions with other residents they don’t know.

They also express their refusal to engage in social interaction.

The majority of these behaviours are both self-centered and social interactions with others residents or caregivers.

No negative behaviours.
Limit of the study

No existing comparisons with residents not suffering from dementia
Perspectives

- Development of direct observation in dementia

- Study social interactions of people with dementia at advanced stages of the disease

- Evolution of social interactions of residents with dementia when they interact regularly?

- Do psychosocial interventions have an impact on social interactions?
Conclusion

- Nursing homes are social environments.

- Maintaining and/or increasing social interactions is a good way of cognitive stimulation and avoid feeling of loneliness (Amieva and al, 2010).

- These data might contribute to the knowledge of social inclusion.
Thank you for your attention

Contact : jeanbernard.mabire@gmail.com