



Do's and don'ts in physical activity research among chronically ill older persons

Marjke Hopman-Rock PhD MSc MA  
Erwin Tak MA

TNO | Knowledge for practice


---

---

---

---

---

---


---

---

Topics

- Dementia,
- Mild cognitive impairment,
- Osteoarthritis of the hip and/or knee
- Incontinence (urine)

2 Do's and do nots ECSS Oslo June 2009




---

---

---

---



---

---

---


---

Psychomotor Activation Programme (PAP) for demented elderly  
(Hopman-Rock et al, Int J Geriatr. Psych, 1999; Book by dr. Rose Marie Droëts)

Beneficial for negative group behaviour in people with mild dementia

3 Do's and do nots ECSS Oslo June 2009




---

---

---

---

---

---

---

---

**Do's**

- Use measurement by observation as much as possible;
- Intensive training of caregivers is required;
- Involve family in informed consent;
- Multicenter studies may avoid blinding and contamination problems;
- Actigraphs may be used in these populations (known from other studies that we performed).

**Dont's and learning points**

- Avoid hurries (tests take time);
- Be aware of different regimes in homes for the elderly: communicate with all operational levels (takes also a lot of time).



---

---

---

---

---

---

---

---

**Mild Cognitive Impairment**  
(Van Uffelen et al., Br. J Sport Med, 2008)



**Sportive Walking program**  
Duration: 12 months  
Location: Outside  
Frequency: 2x 60 min p. week  
Intensity: Aerobic and gradually increasing

**Placebo Activity**  
12 months  
Inside  
2x 60 min p. week  
Low intensity, non-aerobic



---

---

---

---

---

---

---

---

**Results:**

In participants who participated regularly, walking had a promising beneficial effect on memory in men and on memory and complex processing in women

**Problems:**

Study power low due to dropout!  
Contrast experimental and control too low



---

---

---

---

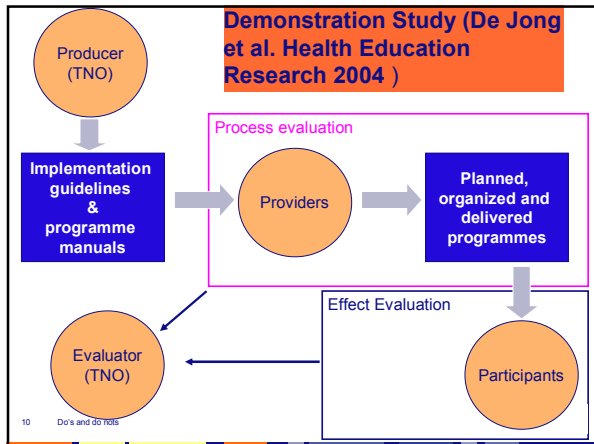
---

---

---

---






---

---

---

---

---

---

---

---

- Do's**
- Recruit patients that are in the right phase of behavioural change. Do not ask the GPs, ask patients directly.
  - Learn people how to cope with their doctor!
  - Check if programmes are feasible and well delivered in practice.
  - Compare RCT and implementation study: ecological validity?
- 11 Do's and do not's ECSS Oslo June 2009

---

---

---

---

---

---

---

---

- Learning points**
- Dilemma: programmes proved to be feasible and well delivered in practice as long as project was paid;
  - Cooperation between occupational groups difficult without project payment;
  - Flexibility facilitates local providers, but re-invention may frustrate the dissemination process if the core components are changed;
  - From development to dissemination takes a long time (15 yrs), funds (> 2 million euro), a lot of effort and patience
- 12 Do's and do not's ECSS Oslo June 2009

---

---

---

---

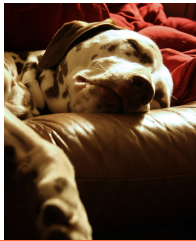
---

---

---

---





Last points:  
Cooperation between researchers and practitioners  
Foreseeing Implementation

---

---

---

---

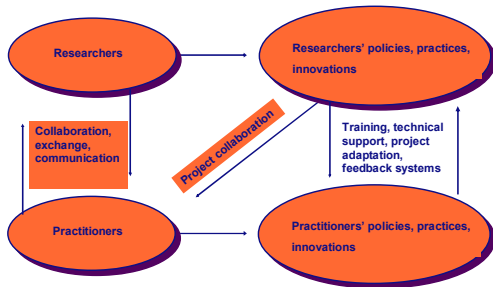
---

---

---

---

Linkage system  
research and practice (Orlandi et al. 1990)



---

---

---

---

---

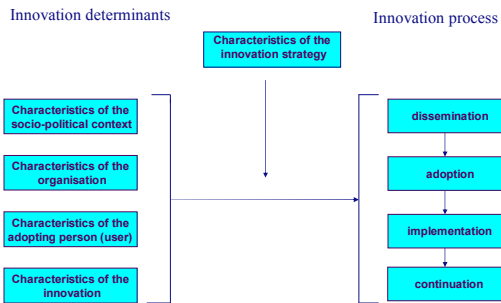
---

---

---

### Theoretical framework

Fleuren et al, Int J Qual Health Care, 2004



---

---

---

---

---

---

---

---

## Take Home Messages

- RCTs in chronically ill older populations are possible
- But require much time and efforts (and budget!)
- Blinding is sometimes difficult
- Power problems by drop out (vulnerable population)
- Cooperation with practitioners necessary but time consuming
- Adjust to peoples wishes and capabilities
- Implementation challenge exists

---

---

---

---

---

---

---

---

Thanks for your attention

Prof. dr. Marijke Hopman-Rock  
TNO Quality of Life, Leiden, The Netherlands

[marijke.hopman@tno.nl](mailto:marijke.hopman@tno.nl)

[www.EUNAAPA.org](http://www.EUNAAPA.org)

[www.PASEONET.org](http://www.PASEONET.org)

[www.tno.nl](http://www.tno.nl)

[www.bodyatwork.nl](http://www.bodyatwork.nl)



TNO/U university medical center  
Amsterdam

---

---

---

---

---

---

---

---