



Physical activity behaviour change for older adults (60+ and 75+)

Marijke Hopman-Rock PhD MA MSc  
ECSS Oslo 2009

TNO | Knowledge for practice


---

---

---

---

---

---

---

---

Topics

- Introduction
- Physical activity standards (US and EU)
- Effective programmes and strategies
- Physical activity and falling
- PA promotion in clinical practice
- Discussion

2 ECSS 2009 June 2009 TNO

---

---

---

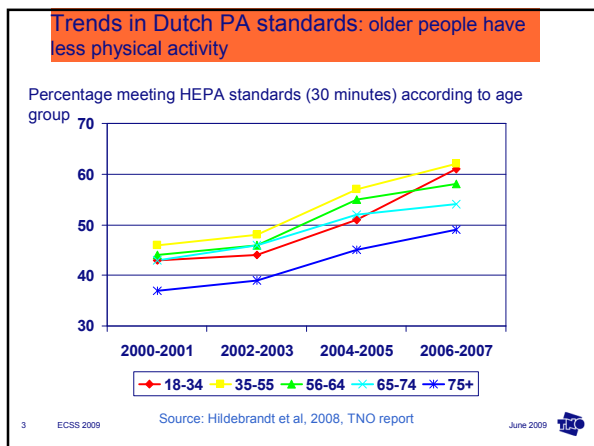
---

---

---

---

---




---

---

---

---

---

---

---

---



### European PA guidelines by EU working group Sport & Health (October 2008)

- Based on White paper on Sport (2007) and White paper on Nutrition, Overweight and Obesity (2007) from EU.
- Chapter for seniors:

“ Cultural, psychological and health factors often inhibit PA and exercise in old age. Thus special care is needed to create and support the motivation of elderly people to be physically active, particularly if they are not used to being physically active “

---

---

---

---

---

---

---

---

### Three action guidelines from European guidelines:

- Link PA to psychological and physiological health and to awareness of problem;
- Provide accessible and attractive facilities;
- Attention for care personnel to support older people in maintaining PA.



---

---

---

---

---

---

---

---

### Effective programmes and strategies

- Review by Vander Bij et al (2002):  
“Home-based, group-based and educational PA interventions can results in increased PA, but changes are small an short-lived” (in older persons);  
“The beneficial effect of behavioural reinforcement strategies was not evident”.
- Kahn et al (2002): “ individual adapted health behaviour change is effective in adult populations”.

---

---

---

---

---

---

---

---

### Effective programmes and strategies (cont)

- Best Practice Statement ACSM (Cress et al, 2004):  
Principles of behaviour change (in older persons):  
Social support  
Self-efficacy  
Active choices  
Health contracts  
Assurance of safety  
Positive reinforcement
- UK National institute for health and clinical Excellence (NICE, Cavell et al, 2006, chapter older adults)  
a.o.: Exercise counselling and instruction

10 ECSS 2009

June 2009



---

---

---

---

---

---

---

---

---

---

### Effective programmes and strategies (cont) Evidence? Systematic review on methods of promoting PA (Swedish Council, 2007 [www.sbu.se](http://www.sbu.se))

- Advice and counselling of patients in everyday clinical practice increases physical activity by 12–50% for at least six months after the counselling session (**strong scientific evidence**, that means that it is supported by at least two studies with high study quality);
- More frequent, intensive counselling by means of repeated sessions for several months additionally boosts physical activity (**limited scientific evidence**, that means supported by at least two studies with medium study quality).
- Counselling supplemented by prescribed physical activity, diaries, pedometers, informational brochures, etc, increases activity by another 15–50% (**limited scientific evidence**).

11 ECSS 2009

June 2009



---

---

---

---

---

---

---

---

---

---

### Effective programmes and strategies (cont) Evidence?

- In the area of Theory-Based Behavioural Interventions:  
Theory-based behavioural intervention increases physical activity 10–15% more than usual care and as much as structured exercise programs (**limited scientific evidence**).  
More extensive behavioural interventions further boost physical activity, though with a diminishing marginal effect (**limited scientific evidence**).  
Interventions that include a person's entire lifestyle, focusing on diet and stress management as well as physical activity, reinforce the increase in activity (**limited scientific evidence**).

12 ECSS 2009

June 2009



---

---

---

---

---

---

---

---

---

---

## Falls and Falls prevention (www.profane.eu.org)

- 1 out of 3 older community living people (>65 years) falls yearly
- 1 out of 2 nursing home living people falls yearly
- High medical costs
- High impact on quality of life

Challenge:

- Falls prevention is needed



13 ECSS 2009

June 2009

---

---

---

---

---

---

---

---

---

---

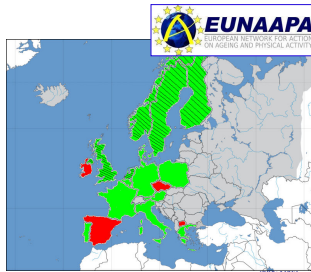
## EUNAAPA

Project lead prof. Alfred Ruetten  
Erlangen/Nuerenberg university

•Vision:  
Optimal health and quality  
of life for older people in  
Europe through physical  
activity

- Associated Partners
- Collaborating Partners
- Additional Cooperating Countries

•Goal  
The network has the goal to  
use evidence-based  
strategies to improve health  
and quality of life among  
older people in Europe  
through physical activity



14 ECSS 2009

June 2009

---

---

---

---

---

---

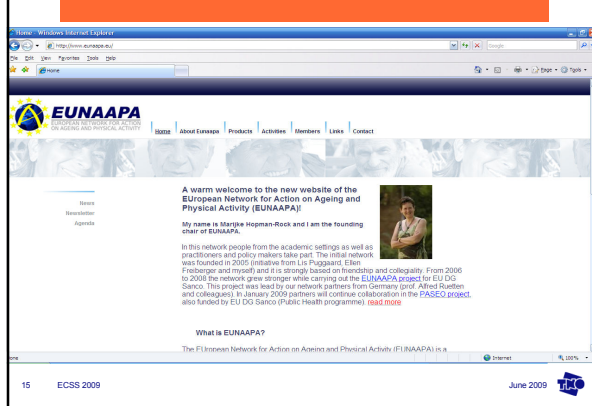
---

---

---

---

## www.eunaapa.org



The screenshot shows the homepage of the EUNAAPA website. At the top, there is a navigation menu with links for Home, About Europe, Products, Activities, Members, Links, and Contact. Below the menu, a large banner features a collage of people's faces. A central text block reads: "A warm welcome to the new website of the European Network for Action on Ageing and Physical Activity (EUNAAPA)!" followed by a photo of Marjke Hopman-Rock and a short biography. Below this, a section titled "What is EUNAAPA?" provides a brief overview of the network's mission and history. The footer of the page includes the text "The European Network for Action on Ageing and Physical Activity (EUNAAPA) is a..." and the date "June 2009".

15 ECSS 2009

June 2009

---

---

---

---

---

---

---

---

---

---

## EUNAAPA

- Reviews (measurements in the area of older persons and PA, Mobility, Muscle strength, Endurance, ADL problems, etc)
- Cross national report about best practices and recommendations of PA promotion for older persons (Scott et al, 2008):

For instance:

Greater emphasis on disadvantaged groups  
Screening for readiness for behavioural change

---

---

---

---

---

---

---

---

---

---

PA promotion in clinical practice: a review

Systematic Reviews

**Effectiveness of exercise-referral schemes to promote physical activity in adults:**  
systematic review

Najm H Williams, Maggie Hendry, Barbara France, Ruth Lewis and Claire Wilkinson

Williams et al, Brit J Gen Pract, 2007  
17 referrals for 1 person to become physically active

**ABSTRACT**  
Background Despite the health benefits of physical activity, most adults do not take the recommended amount of exercise.  
Aim To assess whether exercise-referral schemes are effective in improving exercise participation in sedentary adults.  
Design of study Systematic review.  
Method Studies were identified by searching MEDLINE, CINAHL, EMBASE, AMED, PsycINFO, SPORTDiscus, The Cochrane Library and DARE (Health Research). Randomised controlled trials (RCTs), observational studies, process evaluations and qualitative studies of exercise-referral schemes, defined as referral to a primary care clinician to a programme that encourages physical activity or exercise were included. RCT results were considered a main priority where these were available.

**INTRODUCTION**  
Despite the health benefits of regular exercise, the UK population is mostly sedentary. For the prevention of cardiovascular disease, guidelines recommend that adults undertake at least 30 minutes of moderate-intensity aerobic physical activity (defined as expending 3.0-7.5 Kcal/min of energy) for at least 5 days of the week. In Wales, only 25% of adults aged 16 years and over (26% of men and 23% of women) achieve this level of physical activity<sup>1</sup> a similar proportion to that in England (29%)<sup>2</sup> and Northern Ireland (28%)<sup>3</sup>, but less than that in Scotland (36%)<sup>4</sup>. In the UK there has been a rapid creation of patient-referral schemes for supervised exercise sessions, which take place in public leisure facilities<sup>5</sup> and a national quality-assurance framework for exercise-referral schemes has been published<sup>6</sup>. The schemes can be defined as referral

---

---

---

---

---

---

---

---

---

---

## Discussion

- Translation of research findings into practice is a challenge? (Dzewaltowski et al, 2004; RE-AIM)
- Community based vs individual? (Verheijden & Kok, 2005)
- How to avoid paternalism? (European Silver Paper 2008)
- Draft recommendations (see paper version)

---

---

---

---

---

---

---

---

---

---

Thanks for your attention

Prof. dr. Marijke Hopman-Rock

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

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

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

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



---

---

---

---

---

---

---

---