Welcome in Groningen
Welcome to Hanze University of Applied Sciences

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• Kick-off Community Erasmus+/Knowledge Key Action 2

Community of Practice for Healthy Lifestyle (COP4HL)

Dean School of Sport Studies: Kris Tuinier

Director Centre of Expertise Healthy Ageing: dr. Han de Ruiter

• https://www.youtube.com/watch?v=F_J2Biao6al&feature=youtu.be
Program kick-off

- Knowing each other and creating a common vision for creating Healthy Lifestyles
- Understanding the general idea and concept of a Community of Practice
- Understanding the idea of establishing a *Local* Community of Practice
- Understanding the local Groningen COP4HL vision and set-up
- Understanding the idea and added value of establishing a *European* Support Structure
- Understanding the *general concept* of the EU project management and administration
- Agreement on follow-up activities and site visits
Program kick-off

• **Wednesday afternoon**
  - Get to know each other
  - Healthy Lifestyle & Community of Practice concept

• **Thursday (into practice “Europa park”)**
  - Update COP Groningen
  - Overview project content/management
  - Individual “walk through”
  - COP work and carousel
  - Wrap up
Program kick-off

• **Friday morning**
  – Action planning
  – Future arrangements
  – A.o.b.
  – Departure
Introduction Project Management Group

- **Hanze team**
  - Johan de Jong (project leader)
  - Chris Kubbinga (project manager)
  - Roya Shokoohi
  - Paul Beenen
  - Franske Holsteijn (master HAP student)
  - Support by Willeke Suurd and Judith van der Boom

- **SPIN**
  - Matthias Guett
  - Ben O’ Rourke
  - Dirk Steinbach
Getting to know each other
Communities of Practice for Healthy Lifestyle
COP4HL
(587982-EPP-1-2017-1-NL-EPPKA2-KA COP4HL)
Relevance Healthy Lifestyle

• Promoting Healthy Ageing / Healthy Life (style): one of main challenges in EU

• Increasing age: coping with ‘illness’

• More chronic diseases, lower QOL, higher costs (~2% global GDP)

• ~90% mortality non-communicable diseases (NCD) (WHO, 2014)

• Ageing & rise NCDs → call for ‘innovative’ action

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Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy

-I Min Lee, Eric J Shiroma, Felipe Lobelo, Pekka Puska, Steven N Blair, Peter T Katzmarzyk, for the Lancet Physical Activity Series Working Group*

Summary
**Background** Strong evidence shows that physical inactivity increases the risk of many adverse health conditions, including major non-communicable diseases such as coronary heart disease, type 2 diabetes, and breast and colon cancers, and shortens life expectancy. Because much of the world’s population is inactive, this link presents a major public health issue. We aimed to quantify the effect of physical inactivity on these major non-communicable diseases by estimating how much disease could be averted if inactive people were to become active and to estimate gains in life expectancy at the population level.

**Methods** For our analysis of burden of disease, we calculated population attributable fractions (PAFs) associated with physical inactivity using conservative assumptions for each of the major non-communicable diseases, by country, to estimate how much disease could be averted if physical inactivity were eliminated. We used life-table analysis to estimate gains in life expectancy of the population.

**Findings** Worldwide, we estimate that physical inactivity causes 6% (ranging from 3·2% in southeast Asia to 7·8% in the eastern Mediterranean region) of the burden of disease from coronary heart disease, 7% (3·9–9·6) of type 2 diabetes, 10% (5·6–14·1) of breast cancer, and 10% (5·7–13·8) of colon cancer. Inactivity causes 9% (range 5·1–12·5) of premature mortality, or more than 5·3 million of the 57 million deaths that occurred worldwide in 2008. If inactivity were not eliminated, but decreased instead by 10% or 25%, more than 533000 and more than 1·3 million deaths, respectively, could be averted every year. We estimated that elimination of physical inactivity would increase the life expectancy of the world’s population by 0·68 (range 0·41–0·95) years.

**Interpretation** Physical inactivity has a major health effect worldwide. Decrease in or removal of this unhealthy behaviour could improve health substantially.

*Lancet 2012;380:219-29*
The distribution of the proportion of European adults reporting sitting more than 7.5 hours per day across the 28 European Union Member States.

http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0149320

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Relevance

Prevalence of overweight* among adults, ages 18+, 2016

Map (mouse over country to display data)
Call for Healthy Lifestyle action
However,…..

• Current approaches **NOT** effective

• Implementation is the KEY

• Reactive systems

• Cross bordering: collaboration between sectors
Need for change

The need for a complex systems model of evidence for public health

Harry Rutter, Natalie Sovova, Ketawan Chong, Jubbib, Susan Cunningham, Allan T. Firegood, Felix Groves, Laura Harper, Penelope Howie, Laurence Moore, Mark Petticrew, Eva Refuerzo, Alan Shell, James Thomas, Martin White

Despite major investment in both research and policy, many pressing contemporary public health challenges remain. To date, the evidence underpinning responses to these challenges has largely been generated by tools and methods that were developed to answer questions about the effectiveness of clinical interventions, and as such are grounded in linear models of cause and effect. Identification, implementation, and evaluation of effective responses to major public health challenges require a wider set of approaches and a focus on complex systems.

A complex systems model of public health conceptualises poor health and health inequalities as outcomes of a multitude of interdependent elements within a connected whole. These elements affect each other in sometimes subtle ways, with changes potentially reverberating throughout the system. A complex systems approach uses a broad spectrum of methods to design, implement, and evaluate interventions for changing these systems to improve public health.

Complex systems are defined by several properties, including emergence, feedback, and adaptation. Emergence describes the properties of a complex system that cannot be directly predicted from the elements within it and are more than just the sum of its parts. For example, the changing distribution of obesity across the population can be conceptualised as an emergent property of the food, employment, transport, economic, and other systems that shape the energy intake and expenditure of individuals. Feedback describes the situation in which a change reinforces or balances further change. For example, if a smoking ban in public places reduces the visibility and convenience of smoking, and this makes it less appealing, fewer young people who require high levels of individual agency, have low reach and impact, and tend to widen health inequalities.

Shifts within multiple elements across the many systems that influence obesity are required, some of which might only have small effects on individuals but can drive large changes when aggregated at population level. Although randomised controlled trials of individual-level interventions are relatively straightforward to do, it is often impossible to randomise a population-level intervention, such as the introduction of a national tax on sugar-sweetened beverages, or the multiple factors that support cycling, such as physical infrastructure, spatial planning, and integration with public transport.

Approaches to research that aim to understand single components within systems, or attempt to factor out the system context using randomisation and control, are thus of limited use for identifying how to influence complex systems to achieve improved population health and wellbeing.

However, research funding, research activity, and the published evidence base are all heavily skewed towards studies that attempt to identify simple, often short-term, individual-level health outcomes, rather than complex, multiple, upstream, population-level actions and outcomes. This skew echoes the prioritisation by policy makers of individual-level interventions over system-level responses, in the face of broad recognition of the need to do the opposite — so-called lifestyle drift.

Although it is important for public health policy to be guided by evidence, if this evidence predominantly supports individual-level interventions that have minimal reach and effect across populations, the benefits of being informed by the existing evidence base might be illusory. Research on systems needs to...
Need for change

Prevention and management of non-communicable disease: the IOC consensus statement, Lausanne 2013

Gordon O Matheson, 1,2 Martin Klügl, 3 Lars Engebretsen, 4,5,6 Fredrik Bendiksen, 4
Steven N Blair, 7 Mats Börjeson, 8,9 Richard Budgett, 7,8 Wayne Derman, 10
Ügur Erdener, 7 John P A Ioannidis, 11 Karim M Khan, 12 Rodrigo Martinez, 13
Willel Van Mechelen, 10,14,15 Margo Mountjoy, 16 Robert E Sallis, 17
Martin Schwellnus, 10,18 Rebecca Shultz, 1,2 Torbjørn Soligard, 3 Kathrin Steffen, 4
Carl Johan Sundberg, 18 Richard Weiler, 19,20 Arne Ljungqvist 5

ABSTRACT
Mortality and morbidity from preventable, non-communicable chronic disease (NCD) threatens the health of our populations and our economies. The accumulation of vast amounts of scientific knowledge has done little to change this. New and innovative thinking is essential to foster new creative approaches that leverage and integrate evidence through the support of big data, technology and design thinking. The purpose of this paper is to summarise the results of a consensus meeting on NCD prevention sponsored by the IOC in April 2013. Within the context of advocacy for multifaceted systems change, the IOC’s focus is to create solutions that gain traction within healthcare systems. The group of participants attending the meeting achieved consensus on a strategy for the prevention and management of chronic disease that includes the following: (1) Focus on behavioural change as the core component of all clinical programmes for the prevention and management of chronic disease. (2) Establish actual centres to design, implement, study and improve preventive programmes for chronic disease. (3) Use human-centered design in the creation of prevention programmes with an inclination to action, rapid prototyping and multiple iterations. (4) Extend the knowledge and skills of Sports and Exercise Medicine (SEM) professionals to build new programmes for the prevention and treatment of chronic disease focused on physical activity, diet and lifestyle. (5) Mobilise resources and leverage networks to scale and disseminate programmes of prevention. True innovation lies in the ability to align thinking around these core strategies to ensure successful implementation of NCD prevention and management programmes within healthcare. The IOC and SEM community are in an ideal position to lead this disruptive change. The outcome of the consensus meeting was the creation of the IOC Non-Communicable Diseases and IOC Working Group charged with the responsibility of moving this agenda forward.

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Future direction HL

• Care → Prevention

• Positive intention

• Community-based intervention/approach (CBI)

• Multi-level

• Multi-sectoral

• Human centred

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Over 500 findings support the benefits of cities designed to move:

**Economic**
- Business and job growth
- Increased tax revenue

**Safety**
- Less crime
- Lower rates of pedestrian and cyclist injuries

**Environmental**
- Reduced emissions
- Improved air quality

**Health**
- Less depression, stress, and chronic disease

**Social**
- Increased civic engagement and volunteerism

**Share your talent. Move the world.**
Make physical activity a part of daily life during all stages of life

6 OUT OF 10 people in the European Union over the age of 15 years or seldom exercise or play sports

Every year in the WHO European Region, physical inactivity causes an estimated 1 MILLION DEATHS

WHO recommendations for moderate- to vigorous-intensity physical activity:
- 150 minutes per week (adults)
- 60 minutes per day (children)

AT HOME
- Gardening is a good way to be physically active.
- Physical activity can improve children’s nutrition.

AT WORK
- Use the stairs, not the elevator.
- Get physical, transport the office supplies.

AT SCHOOL
- Safe and healthy environments can increase physical activity.
- After school activities, such as organized sports and active games, can increase children’s physical activity.

IN THE COMMUNITY
- Community gardens increase physical activity.
- Safety and injury prevention campaigns can make communities safer.

Regular physical activity throughout the life-course enables people to live better and longer lives.

www.euro.who.int/physicalactivity

09/2015

World Health Organization
Erasmus+/Knowledge Alliances

Aim call:

Knowledge Alliances are transnational, structured and result-driven projects, notably between higher education and business. Knowledge Alliances are open to any discipline, sector and to cross-sectoral cooperation. The partners share common goals and work together towards mutually beneficial results and outcomes.

- Boosting innovation in higher education, business and in the broader socio-economic environment
- Developing entrepreneurial mind-set and skills
- Stimulating the flow and exchange of knowledge between higher education and enterprises
Definition of Community of Practice

Learning partnership among people who find it useful to learn from and with each other about a particular domain. They use each other’s experience of practice as a learning resource. And they join forces in making sense of and addressing challenges they face individually or collectively.

General definition of a Community of Practice Wenger 2011, 2015