Institute of Social and Preventive Medicine

How can our societies support physical activity and how can physical activity support our societies?

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Dubai's Third Forum for Physical Activity, 12-13.03.2013, Dubai


Panel 1: Health benefits of physical activity in adults

Conservative assumptions

Calculation of burden of disease

Physical inactivity

% 6% to 10% of cases for these diseases worldwide

9% of premature mortality worldwide (5.3 million deaths)

Comparable to worldwide effects of smoking or obesity

Estimated gains in life expectancy worldwide with elimination of physical inactivity

Global estimate: 0.68 years

Launching «Health Bet» in September 2003

- TV health programme «Gesundheit Sprechstunde» with 300’000-500’000 spectators
- Health magazine «Gesundheit Sprechstunde» with circulation 80’000
- Article in in pharmacy magazine
- 170 (-> 180) participating pharmacies/dispensing chemists

→ Expected number of participants: 1’000 to 10’000


Main conclusions from evaluation «Health Bet»

→ It’s not simple!

**Determinants of (physical activity) behaviour**

- Motivation
- Knowledge
- Skills
- Intrapersonal factors
- Social and physical environment


**The role of physical activity determinants at the population level**

Social and physical environment


**A conceptual approach to determinants of PA**


**Countries resized according to population size**

"The implications of megatrends – key messages"

- On the basis of a review of publications about physical activity interventions, we modelled the effects of megatrends in internet access, mobile phone access, and car ownership on physical activity.

- The direct and potentiating effects of mobile phone technology on physical activity in middle-income and upper-income countries are similar in size to the mean effects of planned physical activity interventions in community and clinical settings.

- The greatest potential (...) might be in the creation of supportive policies in sectors outside health (transportation, urban planning, and communication)"


Evidence-based physical activity interventions: lessons from around the world – mean effect sizes

Co-Benefits of Physical Activity for partners from other sectors

1. “Whole-of-school” programmes
2. Transport policies and systems
3. Urban design regulations and infrastructure
4. Primary health care systems
5. Public education
6. Integrated community-wide programmes
7. “Sport for all” systems and programmes

GAPA, a council of the International Society for Physical Activity and Health ISPAH www.globalpa.org.uk
1. "Whole-of-school" programmes

- personal development (fitness, motor skills, social)
- social inclusion
- class behaviour
- concentration
- academic performance
- physical activity for health

2. London Congestion Charge
London Congestion Charge

Figure 2.1  Traffic entering the central London charging zone during charging hours (07.00-18.30)

- Spring 2003
- Autumn 2003
- Winter 2003
- Spring 2004
- Autumn 2004
- Winter 2004
- Spring 2005
- Autumn 2005
- Winter 2005
- November 2005
- Spring 2006
- Autumn 2006

HEAT
Health Economic Assessment Tool for Cycling and for Walking

www.euro.who.int/HEAT

The Ciclovia and Cicloruta Programs: Promising Interventions to Promote Physical Activity and Social Capital in Bogotá, Colombia

Andrea Tona, MPH, Olga Sarmiento, MD, PhD, Cristina Sudino, PhD, and Roberto Zavies, PhD

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Comparison of adult physical activity levels in three Swiss alpine communities with varying access to motorized transportation. Health & Place, 2007; 13(3): 757-66.
**CONCLUSIONS:** Promotion of physical activity to sedentary adults recruited in primary care significantly increases physical activity levels at 12 months, as measured by self report (...).
Dr. Luci Fehr's Krankheits-Tipp Nr. 2: 
Vermieden Sie sorgfältig jede 
sportliche Betätigung. Gehe 
Sie nie zu Fuß. Fahren Sie nie 
mit dem Fahrrad. Grundsätzlich 
verboten ist 
tiefes Durchatmen – es sei 
denn, Sie ziehen Rauch ein.

Health Promotion Mass 
Media Campaign by 
Foundation Health 
Promotion Switzerland 
in the year 2000

„Dr. Luci Fehr’s 
Illness Tip No 2: 
Carefully avoid all forms of 
sports and physical activity. 
Never walk. Never use your 
bicycle. Never ever breathe 
harder – unless you are inhaling 
tobacco smoke.“

HEPA Survey Switzerland 1999 (n=1529)  
Physical activity as a health resource

„How important do you think is physical activity for your health?“

<table>
<thead>
<tr>
<th>Importance Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very important</td>
<td>69.3%</td>
</tr>
<tr>
<td>Rather important</td>
<td>24.0%</td>
</tr>
<tr>
<td>Moderately important</td>
<td>5.7%</td>
</tr>
<tr>
<td>Of little importance</td>
<td>0.9%</td>
</tr>
<tr>
<td>Not important at all</td>
<td>0.0%</td>
</tr>
<tr>
<td>Total</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Percentages weighted to the Swiss population


Potential of population wide campaigns

Twelve-month effects of Canada on the Move: 
a population-wide campaign to promote 
pedometer use and walking

C. L. Craig1,2, C. Tudor-Loake1,3 and A. Bauman4
Potential of population wide campaigns

Abstract

dissemination and adoption of an easy-to-use tool for self-monitoring purposes.

Introduction

Message recall and pedometer ownership were associated with increased odds of self-reported walking.

The effectiveness of health promotion to increase walking may be enhanced by combining motivational health-related messages with the dissemination and adoption of an easy-to-use tool for self-monitoring purposes.

PR support for existing offers

knowledge

change in values

integration of other health issues

promotion of cultural diversity

physical activity for health

visibility for organising institution


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www.agitasp.org.br

Bike to work

„Try something new“

Surbeck R, Martin-Diener E, Grize L, Spoerri A, Braun-Fahrländer C. Swiss bike-to-work campaign: Did we reach the intended population? Schweiz Z Sportmed Sporttraumatol, in press.

International Congress on Soldier’s Physical Performance
May 18-22, 2005, Jyväskylä, Finland

6 Community-wide programs involving multiple settings and sectors and that mobilize and integrate community engagement and resources

Sports

intrapersonal factors

social and physical environment

1832 Foundation of Federal Gymnastics Federation
In addition to fitness and social aspects, changing priorities over time:
• Piety
• Radical/liberal political movement
• Military
• Conservative

Today Swiss Gymnastics Federation
150'000 active adults members, 140'000 youth
Federal Gymnastics Festival every 6 years.
60'000 participants expected in 2013
The sport sector is viewed as a priority area for increasing rates of physical activity.

Authors’ conclusions
There is an absence of high quality evidence to support interventions designed and delivered by sporting organisations to increase participation in sport.
The programme Allez Hop

- Weekly lessons during ten week courses, qualified instructors
- National programme
- At the beginning in collaboration with sports clubs and associations; later also with independent instructors


Population impact of a nation-wide physical activity programme with 200,000 participants

<1 “sweat episodes” during leisure time reported in the Swiss Health Survey (1997: n=12’999; 2002: n=19’686; 2007: n=18’745)
Why is there not more scientific evidence for the role of sports?

- Good studies need early planning and long-time commitment
- Designs with control groups are difficult in settings where there is a long-time history of sports

Dubai would be in an ideal situation to address these issues!
For population health, the need for more physical activity is clear
• So why do people need society to be more active? ✓
• How does society influence physical activity? ✓
• How can we motivate partners from other sectors? ✓
• Sport and physical activity promotion - where is the evidence? (✓)
• How can we exchange experiences and work together? ✓

Recommendations for the Dubai Sports Council:
• Continue with the good work
• Keep contributing to international exchange
• Contribute to the scientific evidence on the potential of sports