Health Behaviour in School-aged Children (HBSC): a World Health Organization Collaborative Cross-national Study

Prof. Dr. Ulrike Ravens-Sieberer
on behalf of the HBSC International Coordinator

WHO Collaborating Center for Child and Adolescent Health Promotion,
School of Public Health,
University of Bielefeld, Germany
Broad aims of HBSC

- To increase understanding of young people's health and well-being, health behaviours and their social context
- To inform and influence policy and practice at national and international levels
HBSC key objectives

- Contribute to scientific evidence base on adolescent health and its determinants
- Establish and strengthen a multi-disciplinary international network of researchers
- Disseminate research findings to relevant policy and practice audiences
- Develop ecological and developmental perspectives that inform health promotion in schools, families and local communities
HBSC scope

- Includes physical, emotional and social health and well-being
- Measures comprehensive range of behaviours that both risk and promote health
- Places health and behaviour of young people in social and developmental context
Background

- HBSC initiated in 1982 by three countries, shortly afterwards adopted as a WHO collaborative study
- Now has 41 member countries/regions in Europe and North America
- A collaborative project between national research teams and in partnership with WHO
- Surveys conducted every 4 years using standard international questionnaire in all countries (latest survey 2005–2006)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. England</td>
<td>1. Finland</td>
<td>1. Finland</td>
<td>1. Finland</td>
<td>1. Finland</td>
<td>1. Finland</td>
<td>1. Finland</td>
</tr>
<tr>
<td>3. Austria</td>
<td>3. Austria</td>
<td>3. Austria</td>
<td>3. Austria</td>
<td>3. Austria</td>
<td>3. Austria</td>
<td>3. Austria</td>
</tr>
<tr>
<td>16. Belgium (Flemish)</td>
<td>16. Belgium (Flemish)</td>
<td>16. Belgium (Flemish)</td>
<td>16. Belgium (Flemish)</td>
<td>16. Belgium (Flemish)</td>
<td>16. Belgium (Flemish)</td>
<td>16. Belgium (Flemish)</td>
</tr>
<tr>
<td>29. USA</td>
<td>29. USA</td>
<td>29. USA</td>
<td>29. USA</td>
<td>29. USA</td>
<td>29. USA</td>
<td>29. USA</td>
</tr>
<tr>
<td>31. Italy</td>
<td>31. Italy</td>
<td>31. Italy</td>
<td>31. Italy</td>
<td>31. Italy</td>
<td>31. Italy</td>
<td>31. Italy</td>
</tr>
<tr>
<td>34. Slovenia</td>
<td>34. Slovenia</td>
<td>34. Slovenia</td>
<td>34. Slovenia</td>
<td>34. Slovenia</td>
<td>34. Slovenia</td>
<td>34. Slovenia</td>
</tr>
<tr>
<td>37. Turkey</td>
<td>37. Turkey</td>
<td>37. Turkey</td>
<td>37. Turkey</td>
<td>37. Turkey</td>
<td>37. Turkey</td>
<td>37. Turkey</td>
</tr>
</tbody>
</table>
HBSC Global organisation

- One network of researchers in national teams
- One assembly of elected principal investigators (one PI / country), votes all decisions
- One coordinating comitee, CC (elected members)
- One international coordinating center, led by one international coordinator, ICC (elected)
- One data bank, led by one databank manager, DBM (elected)
- Various other working groups (FG, WG, ad-hoc…)

Health Behaviour in School-aged Children: WHO collaborative cross-national study - www.hbsc.org
HBSC funding and support

- National data collection funded at national level
- International datafile production and management supported by national funding
- WHO (as study partner) supports research dissemination
  - Publication of international reports
  - HBSC-WHO Forum for policy and practice development
Methods

- School–based, pupil self-completed questionnaire, teacher, other school staff or researcher administered
- Sampling unit = Class (or class equivalent)
- Three age groups with mean age 11.5, 13.5 and 15.5 years: focused on the outset of adolescence
- National surveys conducted at same time of year to obtain correct mean ages
- Sample size in each country: minimum of 4,500 (1,500 per age group)
- Data cleaning performed centrally at data bank (Bergen)
- One international data file
Survey instrument

Health and behaviour
- Perceived health, well-being and life satisfaction
- Smoking, drinking and cannabis use
- Physical activity and sedentary behaviour
- Eating and dieting
- Body image
- Height and weight
- Sexual behaviour
- Bullying and fighting
- Injuries

Social and developmental context
- Family structure and relationships
- School environment
- Peer relations and social behaviour
- Socioeconomic circumstances
- Pubertal development
Social context of family and socioeconomic circumstances:

HBSC measures

- Family affluence: car, own bedroom, family computers, family holidays
- Parents occupational status
- Employment in household
- Poverty/disorganised household
- Perceived family wealth
- Family structure and relationships
Other social contexts:
HBSC measures

School:
- Liking school
- Academic pressure
- Academic achievement
- Support from classmates

Peer influence:
- Spending most evenings out with friends
- Having close friend
- Numbers of friends
HBSC measures

Health related behaviours

- Substance use (tobacco, alcohol and cannabis)
- Sexual behaviour (intercourse and contraceptive use)
- Fighting and bullying
- Consumption of soft drinks, fruit, veg, etc
- Breakfast consumption
- Weight control behaviour
- TV watching (sedentary behaviour and exposure to advertising)
- Computer use
- Electronic communication
Health and well-being

measured with a range of indicators including:

• self-rated health
• life satisfaction
• health complaints (physical and psychological)
• body image
• Body mass index
• Injuries
Percentage of 15 year olds who used cannabis 10 times or more in the last year

HBSC 2001/02

Health Behaviour in School-aged Children: WHO collaborative cross-national study - www.hbsc.org
Percentage of 15 year olds who are weekly drinkers

BOYS

GIRLS

HBSC 2001/02

Health Behaviour in School-aged Children: WHO collaborative cross-national study - www.hbsc.org
Percentage of 15 year olds who have ever been drunk 4 or more times

BOYS

GIRLS

HBSC 2001/02

Health Behaviour in School-aged Children: WHO collaborative cross-national study - www hbsc org
15 year olds physically active for less of 4 days (Boys)
15 year olds physically active for less of 4 days (Girls)
15 year olds feeling too fat (Boys)
% low family affluence (FAS) by country

- Ukraine
- Russian Federation
- Latvia
- Greenland
- Lithuania
- Croatia
- Malta
- Poland
- TFYR Macedonia
- Czech Republic
- Estonia
- Hungary
- Portugal
- Greece
- Israel
- Italy
- Belgium (French)
- Spain
- Ireland
- Slovenia
- Scotland
- Finland
- Belgium (Flemish)
- Austria
- Germany
- France
- England
- Wales
- Denmark
- Switzerland
- USA
- Canada
- Sweden
- Netherlands
- Norway

% Low FAS

HBSC 2001/2
Family affluence and daily fruit: HBSC Scotland 2002

†Significant differences between FAS groups (p<0.01)

---

Health Behaviour in School-aged Children: WHO collaborative cross-National study - www.hbsc.org
FAS and physical activity: Scotland 2002

Boys†

Girls†

FAS 1 (low)  FAS 2  FAS 3 (high)

% active at least 5 days per week

†Significant differences between FAS groups (p<0.01)
HBSC approach

- enables understanding of how young people’s health is shaped by social circumstances and developmental processes

- draws attention to health inequalities:
  - age,
  - gender,
  - socioeconomic,
  - geographic

- focuses policy on social and economic determinants
HBSC

- Presents a broad picture of health among young people in Europe and North America: ‘global’ patterns and variations

- Uses a conceptual framework that considers social and developmental determinants of health:
  - socio-economic, family, peers, school, neighbourhood and developmental factors
Dissemination

- National reports/ briefing papers/ fact sheets
- International reports (WHO HEPCA series)
  - 1996: Health of Youth
  - 2000: Health and Health Behaviours of Young People
  - 2002: Gender and Health
  - 2003: Alcohol and Young People
  - 2004: Young People’s Health in Context
  - 2008: Inequalities in Young People’s Health
Dissemination

Scientific journal articles from HBSC network
- 174 published articles (in English)
- Further 40+ submitted/ in press

- Publications listed on web-site ([www.hbsc.org](http://www.hbsc.org))

- Publications database where network members share information on publication plans - encourage network collaboration and avoids overlap

- Collaboration with researchers outside HBSC network – Terms of Reference require HBSC member as consultant or co-author
WHO/HBSC Forum

2006 Forum: Socioeconomic determinants of healthy eating habits and physical activity levels among adolescents

2007 Forum: Social cohesion for mental health among adolescents

- Supports Member States in integrating measures to address socioeconomic determinants of health into policies and interventions
- Review of scientific evidence from HBSC and other studies
- Share good practice at national level on international platform
Forthcoming

- ‘Inequalities in Young People’s Health: Report from 2005/6 HBSC Survey’

- Report of most recent HBSC survey in 41 countries

- Planned for publication June 2008
Further information

- [http://www hbsc.org](http://www.hbsc.org)
- Full list of scientific journal articles
- Downloadable copies of international reports
  
  *Young People’s Health in Context*

- International Coordinating Centre:
  Child & Adolescent Health Research Unit (CAHRU), University of Edinburgh

  [www.education.ed.ac.uk/cahru](http://www.education.ed.ac.uk/cahru)
Thank you!
This paper was produced for a meeting organized by Health & Consumer Protection DG and represents the views of its author on the subject. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or Health & Consumer Protection DG’s views. The European Commission does not guarantee the accuracy of the data included in this paper, nor does it accept responsibility for any use made thereof.