The social determinants of health and well being: achieving action

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Chair: Commission on Social Determinants of Health
Fulbright Symposium
Adelaide

10th July 2008
VALUES
Imperative for action – why and why now?
Areas for action
Advancing SDH
- Health inequalities within and between countries
- Social gradient within countries
Mortality over 25 years according to level in the occupational hierarchy: Whitehall

(Marmot & Shipley, BMJ, 1996)
Life expectancy at age 25 by education, United States, 1988 - 1998

Medical advances averted 180,000 adult deaths in US between 1996-2002

Addressing educational inequalities in mortality would have saved 1.4 million lives

Woolf et al AJPH 2007
Cardiovascular disease mortality by quintile of socioeconomic disadvantage, 25–74, 2002, Australia

Per 100,000

Quintile of socioeconomic disadvantage

1 (most disadvantaged)

2

3

4

5 (least disadvantaged)

Note: Age-standardised to the 2001 Australian population aged 25–74 years.
Source: AIHW Mortality Database in AIHW Bulletin, 37, 2006
In Australia

If everyone experienced the same death rates as those in the least disadvantaged areas 28% of deaths from CVD - over 3,400 CVD deaths - would have been avoided in 2002.

These excess deaths are due to socioeconomic inequality.

AIHW 2006
The Millennium Preston Curve

(Source: Angus Deaton)
% PROBABILITY OF DYING BETWEEN AGES 15 AND 60 (2006)

<table>
<thead>
<tr>
<th></th>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>LESOTHO</td>
<td>79.8</td>
<td>66.3</td>
</tr>
<tr>
<td>RUSSIA</td>
<td>43.2</td>
<td>15.8</td>
</tr>
<tr>
<td>BOLIVIA</td>
<td>24.2</td>
<td>17.6</td>
</tr>
<tr>
<td>SRI LANKA</td>
<td>23.4</td>
<td>9.5</td>
</tr>
<tr>
<td>PAKISTAN</td>
<td>21.8</td>
<td>19.4</td>
</tr>
<tr>
<td>COLOMBIA</td>
<td>17.6</td>
<td>8.7</td>
</tr>
<tr>
<td>SWEDEN</td>
<td>7.8</td>
<td>4.9</td>
</tr>
</tbody>
</table>

Reaching the poor
or
universal policies
Use of maternal and child health services by lowest and highest economic quintiles, 50+ countries

% of population group covered

Adapted from Gwatkin et al 2005
Under 5 mortality per 1000 live births by wealth quintile

Poorest, Less poor, Middle, Less rich, Richest

Gwatkin et al, DHS data
Deaths rates (age standardized) for all causes of death by deprivation twentieth, ages 15–64, 1999–2003, England and Wales

The dashed lines are average mortality rates for men and women in England and Wales.

Romeri et al 2006
<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>UK, Glasgow (Calton)</td>
<td>54</td>
</tr>
<tr>
<td>India</td>
<td>62</td>
</tr>
<tr>
<td>US, Washington D.C. (black)</td>
<td>63</td>
</tr>
<tr>
<td>Philippines</td>
<td>64</td>
</tr>
<tr>
<td>Lithuania</td>
<td>65</td>
</tr>
<tr>
<td>Poland</td>
<td>71</td>
</tr>
<tr>
<td>Mexico</td>
<td>72</td>
</tr>
<tr>
<td>Cuba</td>
<td>75</td>
</tr>
<tr>
<td>US</td>
<td>75</td>
</tr>
<tr>
<td>UK</td>
<td>77</td>
</tr>
<tr>
<td>Japan</td>
<td>79</td>
</tr>
<tr>
<td>US, Montgomery County (white)</td>
<td>80</td>
</tr>
<tr>
<td>UK, Glasgow (Lenzie N.)</td>
<td>82</td>
</tr>
</tbody>
</table>

Sources: WHO World Health Statistics 2007; Hanlon, Walsh & Whyte 2006; Murray et al. 2006
Obesity - selected countries

Source: International Obesity Taskforce
In the United States, where around 30% of the adult population is obese, healthcare expenditure associated with morbid obesity exceeding $11 billion in 2000 (Arterburn et al 2005).
Global Trends in Road Traffic Deaths

Changes in no. of deaths per 100,000 population (%)

Year


Asia
Latin America
Africa
Middle East
High income countries
Proportion of population aged 60 or over

Source: World Population Ageing 2007, UNDESA
Projected deaths by cause for high-, middle and low-income countries


- Cardiovacular Disease (CVD)
- Intentional Injuries
- Other unintentional injuries
- Road traffic accidents
- Other noncommunicable diseases
- Cancers
- Cardiovascular disease
- Maternal, perinatal and nutritional conditions
- Other infectious diseases
- HIV, TB and malaria

2004, 2015, 2030
Deaths from climate change

Estimates by WHO sub-region for 2000 (WHO World Health Report, 2002). Copyright WHO 2005. All rights reserved.
Imperative for action – why and why now?
Areas for action
Advancing SDH
CSDH – Areas for Action

Structural drivers of those conditions at global, national and local level

Conditions in which people are born, grow, live, work and age

Monitoring, Training, Research
England and Wales experience
Scientific Reference group
UK Government Target to Reduce Health Inequalities

By 2010 to reduce inequalities in health outcomes by 10% as measured by infant mortality and life expectancy at birth.
TACKLING HEALTH INEQUALITIES
UK GOVERNMENT

ACHESON 1998

HMT CROSS CUTTING REVIEW 2002

PROGRAMME FOR ACTION 2003
Female life expectancy at birth, inequality gap

England 1993-2006 and target and projection for the year ‘2010’

3 year average

Target:
10% minimum reduction in relative gap, from 1.77% in 1995-97 to 1.59% in 2009-11

DH Status Report 2007
Policy choices
Medical care?
Growing
Living and working
Ageing
Health behaviours
Policy Entry Points

- Social stratification – people’s social position related to their health
- Differential exposure to health damaging conditions
- Differential vulnerability
- Differential consequences of ill health

Level

- Global
- Regional
- National
- Local
- Household
- Individual
Participation in society
Economic and social security
Conditions in childhood and adolescence
Healthier working life
Environments and products
Health promoting medical care
Prevention communicable disease
Health
Physical activity
Sexual health
Eating Safe food
Alcohol drugs tobacco
Safe food
Alcohol
drugs
 tobacco
Eating
 Physical
 activity
Sexual
 Health
 Health
 promoting
 medical
 care
Prevention
 communicable
disease

SWEDISH PUBLIC HEALTH POLICY
Proportion relatively poor pre and post welfare state redistribution

Source: Fritzell & Ritakallio 2004 using Luxembourg Income Study data, CSDH Nordic Network
Countries with generous family policies have lower child poverty rates.

This association is mainly due to policies that support dual earner families.

The contribution may be direct through the amount of benefits paid, or indirect by supporting two earners and thereby raising the market income of the household.
Effects of direct and indirect taxation on % shares of equivalised income for all households by quintile* UK, 2005-06

Gross income = original income + cash benefits
Disposable income = after direct taxes
Post-tax income = after direct and indirect taxes

* Households are ranked by equivalised disposable income
Source: Office for National Statistics
Effects of benefits in kind (state education, health service etc) on final income by quintile groups (2005-06)

Households are ranked by equivalised disposable income

Source: Office for National Statistics
Social Determinants of Health

The causes...
And the causes of the causes
- Medical care?
- Growing
- Living and working
- Ageing
- Health behaviours
EXPENDITURE ON MEDICAL CARE PER CAPITA IN US AND UK

UNITED STATES:
– US$ 6,096

UNITED KINGDOM:
– US$ 2,560 (adjusted for purchasing power)

HEALTH DIFFERENCES BETWEEN ENGLAND AND THE US
55-64 year olds

% Prevalence

Heart disease Diabetes Cancer

Source: Banks, Marmot, Oldfield and Smith; JAMA 2006
- Medical care
- Growing
- Living and working
- Ageing
- Health behaviours
Effects of nutritional supplementation and psychosocial stimulation on stunted children in a 2 year study, Jamaica

Granthan-McGregor et al 1991
Effect of psychosocial stimulation in early childhood on school drop out age 17-18: Jamaican cohort study

Walker et al, Lancet, 2005
Medical care?
Growing
Living and working
Ageing
Health behaviours
Stress in the workplace increases the risk of disease.
The Iso-strain concept of stress at work

- Socially isolated
  - (no supportive co-workers or supervisors)
- High strain
  - (High demands and low control)
ODDS RATIO* OF METABOLIC SYNDROME BY EXPOSURE TO ISO-STRAIN: WHITEHALL II PHASES 1 TO 5

Odds Ratio

*Adj. for age, employment, grade and health behaviours

Chandola, Brunner & Marmot, BMJ, 2006
PAR* for coronary heart disease (fatal CHD/non fatal MI/definite angina)

- DCS
- ERI
- Justice
- Combined
- Full adjustment

Each domain
Combined
Full adjustment

PAR for all combined *
30% 95% CI 10%-46%
adjusted for other predictors
29% 95% CI 9%-45%

*Population attributable risk
odds ratios adjusted for age, sex, employment grade

J Head et al, 2007
NEIGHBOURHOOD SOCIAL COHESION AND SELF-RATED HEALTH

Odds ratio of poor health compared to high social cohesion areas

Source: HSE participants living in Greater London
POOR SELF-RATED HEALTH AND % SINGLE PARENT HOUSEHOLDS IN NEIGHBOURHOOD

HELSINKI | LONDON

% single parent households in neighbourhood

Odds ratio*:

- Poor self-rated health

*Adjusted for age and sex

(Stafford et al. JECH 2004)
Medical care?
Growing
Living and working
Ageing
Health behaviours
Loneliness by wealth

Feel lack of companionship
Feel left out
Feel isolated from others
Feel in tune with people around

Source: English Longitudinal Study of Ageing

% often/some of the time (except for “Feel in tune with people around” where % refers to hardly ever/never)
Poor Self-rated health at ages 65 and over by perceptions of neighbourhood environment: UK

*facilities in the local area: leisure/social/facilities for people aged 65+, rubbish collection, health facilities, transport, closeness to shops, somewhere nice to go for a walk)

(Source: Bowling et al JECH 2006; 60:476-483)
Minimum income for healthy living – Morris et al.

- Diet
- Physical activity/body and mind
- Psychosocial relations/social connections/active minds
- Getting about
- Medical care
- Hygiene
- Housing
Psychosocial relations/social connections/active minds

- Telephone
- Stationery, stamps
- Gifts to grandchildren/others
- Cinema, sports, etc
- Meeting friends, entertaining
- TV set and licence
- Newspapers
- Holidays (UK)
- Miscellaneous, hobbies, gardening etc

Morris et al 2007
Disposable incomes for people over 65, England 2007

<table>
<thead>
<tr>
<th></th>
<th>State pension</th>
<th>Pension credit guarantee*</th>
<th>Minimum income for healthy living **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single person</td>
<td>£87.30</td>
<td>£119.05</td>
<td>£131.00</td>
</tr>
<tr>
<td>Couple</td>
<td>£139.60</td>
<td>£181.70</td>
<td>£208.00</td>
</tr>
</tbody>
</table>

*Rent, mortgage and council tax may be paid after further means testing
** people 65+ living independently in the community; excludes rent, mortgage and council tax
Morris et al 2007 IJE
Medical care?
Growing
Living and working
Ageing
Health behaviours
health is not simply about individual behaviour or exposure to risk, but how the socially and economically structured way of life of a population shapes its health
Average weekly alcohol consumption by sex and socioeconomic class – Great Britain

Mean number of units a week

ONS General Household Survey 2005
Age-standardised alcohol-related death rates by deprivation* twentieth and sex, England and Wales 1999-2003

* Carstairs deprivation index

Source: ONS 2007
Socioeconomic inequalities in male cirrhosis of the liver mortality: Australian manual and non-manual workers

1992: manual 2 times mortality rate of non-manual workers
2002: manual 2.5 times mortality rate of non-manual workers

Age standardised Mortality per 100,000

Najman et al 2007
Closing the gap in a generation
Improvements in under 5 mortality rates/1000 live births – selected countries 1970 - 2005

Source: UNDP 2007
CSDH – Areas for Action

Health Equity in all Policies

Early child development and education
Healthy Places
Fair Employment
Social Protection
Universal Health Care

Good Global Governance
Gender Equity

Fair Financing
Market Responsibility

Political empowerment
– inclusion and voice
CSDH – Areas for Action

Health Equity in all Policies

- Early child development and education
- Healthy Places
- Fair Employment
- Social Protection
- Universal Health Care

Fair Financing

Market Responsibility

Gender Equity

Political empowerment – inclusion and voice

Good Global Governance
Positioning health equity as a global development outcome;

Development of society judged by:
- population health
- fair distribution of health
- protection from disadvantage due to ill-health
CSDH – Areas for Action

Health Equity in all Policies

Early child development and education
Healthy Places
Fair Employment
Social Protection
Universal Health Care

Good Global Governance

Fair Financing

Market Responsibility

Gender Equity

Political empowerment – inclusion and voice
CSDH – where we are – where we are going
Imperative for action – why and why now?
Canada – action on SDH
Areas for action
Advancing SDH
Building a social movement for action on the social determinants of health and health equity
“Let’s not forget that visionaries have been the realists in human progress…”

Halfdan Mahler, WHA 2008
A world where social justice is taken seriously

www.who.int/social_determinants/en