Health Issues and their Correlates in Older People

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Workshop “Consumption and Well-Being in the Aging Society: Advancing Research on Older Consumers” organized by the German Institute for Japanese Studies Tokyo, 29.09.-01.10.2011
Structure

1. Demographic change in Germany
2. Social change and healthy life expectancy in Germany
3. Factors affecting health in the second half of life
4. Implications for consumer behaviour
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Life Expectancy in Germany Increases

<table>
<thead>
<tr>
<th>Year</th>
<th>At birth</th>
<th>At age 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991/92</td>
<td>72.5 years</td>
<td>79.3 years</td>
</tr>
<tr>
<td>2007/09</td>
<td>77.3 years</td>
<td>82.5 years</td>
</tr>
</tbody>
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<tr>
<td>1991/92</td>
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<td>83.0 years</td>
</tr>
<tr>
<td>2007/09</td>
<td>82.5 years</td>
<td>85.5 years</td>
</tr>
</tbody>
</table>

Statistisches Bundesamt 2010 (Source: DZA, Gerostat)
Growth of the Older Age Groups

Population by Age Group

2008
- < 20 years: 20%
- 20-64 yrs.: 61%
- 65-79 yrs.: 15%
- 80+ yrs.: 5%

2060
- 20-64 yrs.: 50%
- 65-79 yrs.: 20%
- 80+ yrs.: 16%
- < 20 years: 14%

Statistisches Bundesamt, 2009
Structure

1. Demographic change in Germany
2. **Social change and healthy life expectancy in Germany**
3. Factors for and consequences of (good/poor) health in old age
4. Implications for consumer behaviour
Population-Based Health Interview Data: Self-Reported Prevalence Rates

Diseases (number of chronic diseases)
- Sum score of 11 diseases such as cardiovascular diseases, back and joint problems, cancer, diabetes, respiratory problems
- Definition: High multimorbidity = 5 or more coexistent diseases

Subjective Health: Self-rated health
- “How would you rate your current health status?”
- Definition: “Poor self-rated health” = self rating as “poor / very poor”

Functional health: Activities of daily living (ADL/iADL)
(Not administered in Wave 1 / 1996)
The German Ageing Survey (DEAS)

Sample of persons 40+, representative for Germany, drawn from municipality registers.

Methods: Personal Interviews, questionnaires (+ tests)

- B-1996: German population in private households (n=4,838)
- P-1996-2002: Six-Year-Panel (n=1,524)
- B-2002: German population in private households (n=3,084), Non-Germans (n=586)
- P-1996-2002-2008: Twelve-Year-Panel (n=994/740)
- P-2002-2008: Six-Year-Panel (n=1,001)
- B-2008: Population in private households in Germany (n=6,205)

www.german-ageing-survey.de
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## Analysing Social Change via Cohort Comparisons: Same Age – Different Birth Cohorts

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<thead>
<tr>
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<tbody>
<tr>
<td>1915-1920</td>
<td>76-81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921-1926</td>
<td>70-75</td>
<td>76-81</td>
<td></td>
</tr>
<tr>
<td>1927-1932</td>
<td>64-69</td>
<td>70-75</td>
<td>76-81</td>
</tr>
<tr>
<td>1933-1938</td>
<td>58-63</td>
<td>64-69</td>
<td>70-75</td>
</tr>
<tr>
<td>1939-1944</td>
<td>52-57</td>
<td>58-63</td>
<td>64-69</td>
</tr>
<tr>
<td>1945-1950</td>
<td>46-51</td>
<td>52-57</td>
<td>58-63</td>
</tr>
<tr>
<td>1951-1956</td>
<td>40-45</td>
<td>46-51</td>
<td>52-57</td>
</tr>
<tr>
<td>1957-1962</td>
<td>40-45</td>
<td></td>
<td>46-51</td>
</tr>
<tr>
<td>1963-1968</td>
<td></td>
<td>40-45</td>
<td></td>
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</tbody>
</table>
Prevalence of Multimorbidity in Different Age Groups

Waves
1996 2002 2008
Involving people from subsequent birth cohorts, all in the age range of 40-45 years
Three Hypotheses About Social Change and Health

Starting Point
- Healthy Life Years
- Disease

Expansion of Morbidity
- Longer Life = more years with illnesses (Gruenberg, 1977)
- Healthy Life Years
- Disease
- Increase in life expectancy

Compression of Morbidity
- Longer Life = more years in good health (Fries, 1980)
- Healthy Life Years
- Disease

Dynamic Equilibrium
- Longer Life = both more years in good health and illness (Manton, 1982)
- Healthy Life Years
- Disease

Onset of diseases & disabilities

Healthy Life Expectancy

- Computation of health expectancies with the Sullivan method:

- Health expectancy…
  is the number of remaining years, at a particular age, which individuals of a population can expect on average to live in a healthy state (however health may be defined).

- Sullivan method uses…
  data issued from regular period life tables and from cross-sectional surveys (DEAS*) providing prevalence of a given health dimension

- This method provides data on…
  - total life expectancy
  - total number of years spent with disability
  - total number of years lived without disability (DFLE / HALE)

(* Stratified sample by age, gender, region → weighted data; age-centered)

Compression or Extension of Morbidity?

- Present findings on diseases suggest an increase in disability-free life expectancy (DFLE) both for men and women in Germany → compression of morbidity.

- However findings on self-rated health are less consistent, only small improvements in self-rated health.

Limitations...

- Surveys are always selected in favor of younger and healthier people (however, this similarly applies to W1, W2, and W3)

- People aged 82 or over and those living in nursing homes were not included
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Factors Affecting Health in the Second Half of Life

- **Societal and environmental contexts**
  Societal wealth, health and long term care systems, neighbourhood characteristics

- **Socio-economic status**
  Educational status, income and wealth, occupational prestige and occupational challenges

- **Life style**
  Participation and (leisure) activities, health behaviour (e.g. nutrition, drug use, physical activities), social integration
SES and Health in the Second Half of Life

Age as leveler

Continuous Influence of SES

Cumulative (Dis)advantage

Education
Income
Wealth

Physical Health
Functional Health
Subjective Health

Education
Income
Wealth

Physical Health
Functional Health
Subjective Health

Education
Income
Wealth

Physical Health
Functional Health
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Implications I

1. **Future generations of older people will be healthier/fitter.**
   But: future cohorts may suffer from other influences (e.g. obesity). Dynamic shifts of retirement age according to (healthy) life expectancy? Education, Life-long learning and adequate working conditions are highly important, too.

2. **Early investments are important, but late investments are effective.**
   Education may be seen as “early investment” in late life health. However, it is never too late: Health behaviour intervention is effective in middle and late adulthood as well.

3. **There is room for health promotion and prevention.**
   Although some facets of health behaviour improve with age (e.g. use of alcohol and nicotine), others get even worse (e.g. physical activity).

4. **Industry may develop goods and services for active ageing.**
   But: future cohorts of older people will have lower income and purchasing power.
Implications II

5. **Chronic conditions will remain a challenge.** Despite improving health of future cohorts of older people, chronic conditions will remain a challenge of late adulthood – even for a large minority of people in middle adulthood. Health care system: From curing medicine to health promotion, prevention, and management of disease.

6. **Very old age will be characterized by multimorbidity and frailty.** The absolute numbers of frail older people in need of care will increase in the future. Maybe we have to change our images of the life span (e.g. Frailty and dementia as normative developmental task).

7. **Consumer protection will have higher importance.** Choice between goods and services for the people in active and in frail old age is highly attractive, but should be accompanied by consumer protection.
Thank you very much!

clemens.tesch-roemer@dza.de
## The German Long-Term Care Insurance

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.34 million persons in need of long-term care receiving benefits</td>
<td></td>
</tr>
<tr>
<td>Cared for at home:</td>
<td></td>
</tr>
<tr>
<td>1.62 million persons</td>
<td>(69%)</td>
</tr>
<tr>
<td>Cared for by family and private network:</td>
<td>1.07 million persons</td>
</tr>
<tr>
<td>Cared for by home care services:</td>
<td>555,000    persons</td>
</tr>
<tr>
<td>Cared for in residential homes:</td>
<td>677,000    (32%) persons</td>
</tr>
<tr>
<td>About 1 million informal caregivers:</td>
<td></td>
</tr>
<tr>
<td>• Spouses</td>
<td></td>
</tr>
<tr>
<td>• Children (in-law)</td>
<td></td>
</tr>
<tr>
<td>• Grandchildren</td>
<td></td>
</tr>
<tr>
<td>• Other family members</td>
<td></td>
</tr>
<tr>
<td>• Neighbours</td>
<td></td>
</tr>
<tr>
<td>12,000 home care services with 269,000 employees</td>
<td></td>
</tr>
<tr>
<td>In 11,600 residential homes with 621,000 employees</td>
<td></td>
</tr>
</tbody>
</table>

Source: Destatis (2011), German Care Statistics 2009