Public Health Research in Germany 2014
Overview and Lessons (yet to be) learned

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DFG Roundtable Discussion on “Public Health Research in Germany: Criteria and Structures”
January 20-21, 2014, Bonn, Germany
Purpose and suggested Outcomes of the Meeting*

1) Discuss quality, access and regulatory issues of existing research infrastructures in Germany
   - Public Health Research in Germany since 1992
   - Funding of Public Health Research to date

2) Define high-quality research criteria to be used in a guideline for evaluating grant proposals

3) Address adequate DFG funding formats

*as suggested by DFG in the invitation letter
Definition Public Health (WHO)*

Public health refers to all organized measures (whether public or private) to prevent disease, promote health, and prolong life among the population as a whole. Its activities aim to provide conditions in which people can be healthy and focus on entire populations, not on individual patients or diseases. Thus, public health is concerned with the total system and not only the eradication of a particular disease.

The three main public health functions are:

1) The assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities.

2) The formulation of public policies designed to solve identified local and national health problems and priorities.

3) To assure that all populations have access to appropriate and cost-effective care, including health promotion and disease prevention services.

*as referred to by DFG in the invitation letter
“Public Health is distinctly a member of the younger generation in the academic sisterhood.”
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C.-E. A. Winslow, 1925
<table>
<thead>
<tr>
<th>Time Period</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>19. and 20. century</td>
<td><strong>Major international input</strong> into the science, policy, and practice <strong>from German Public Health Research</strong> (Franck, Virchow, von Pettenkofer, …)</td>
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<td>1933-1945</td>
<td><strong>Perversion</strong> of the concept of “hygiene” during the Third Reich</td>
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<td>After 1945</td>
<td><strong>Individual academic initiatives</strong> at institutes for hygiene, social medicine, sociology, etc.</td>
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<td>1992-2000</td>
<td><strong>“Re-birth” of Public Health Research</strong> through a temporary structural support by the Federal Ministry of Education and Research (BMBF)</td>
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Major structural support by BMBF (50 Mio. Euro for 8 years) + structural support by state ministries led to

• 5 regional networks of Public Health Research

• several chairs for Public Health

• 1 Faculty for Public Health

• 330 research projects (ca. 190 funded through the program and 140 additional projects)

• Expectation: take-off-phase
Funding of Public Health Research since 2000

- Federal Ministry of Education and Research (BMBF)
- Federal Ministry of Health (BMG)
- State Ministries of Education and Research
- European Union (EU)
- German Research Foundation (DFG)
- Sickness Funds, Workmen Compensation Schemes
- Foundations
Funding Organizations According to Categories

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<tr>
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Relevant to knowledge

Relevant to immediate application

Chalmers et al. 2014, modified after Stokes 1994
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Funding Organizations According to Categories

- Pure basic research
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- Relevant to immediate application
- Relevant to knowledge

Foundations

BMG
Sickness Funds

Chalmers et al. 2014, modified after Stokes 1994
Limited Funding for Public Health Research

- Federal Ministry of Health (BMG)
  - Few grants for specified applied research questions
  - Governmental institutes (e.g. RKI, BZgA) with intramural research

- Sickness Funds, Workmen Compensation Schemes
  - No systematic or structural funding of Public Health Research

- Foundations
  - No foundations with focus on Public Health Research
Funding Organizations According to Categories

Pure basic research
- State ministries
- DFG

Use inspired basic research
- BMBF
- EU

Pure applied research

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State Ministries: Public Health Research

- Structural support for universities (stagnant)
  - 3-4 Schools of Public Health (Berlin, Bielefeld, Bremen, Munich)
  - ca. 10-15 institutes/units of Public Health

- Shared funding (with BMBF) of research institutes belonging to the Helmholtz and Leibniz associations

- Funding of units for Public Health at universities of applied science
BMBF: Public Health Research

- Framework of prevention research funding program (2004-2012)
- Calls for research on prevention and health promotion (often less than 10% success rates)
- Shared funding (with BMBF) of research institutes belonging to the Helmholtz and Leibniz associations
- National cohort

But:
No systematic Public Health Research Support (e.g. the word “Public Health“ does not appear in the “Roadmap for the Health research program“ and the “Health Research Framework Programme“ from 2010)
EU: Public Health Research

• For many years EU Framework programs have been a major funding source for public health research, however…

Walshe et al. 2013 in The Lancet

Health systems and policy research in Europe: Horizon 2020

• “European Commission’s health research budget is dominated by biomedical topics— […] in 2011 only 4% was allocated to health systems, public health, or health policy research”.

• “Horizon 2020: […] health research as a lever for economic growth through patentable technological advances, exploitable intellectual property, […] Health systems and policy research, which will rarely result in patentable intellectual property, tend to be excluded.”
### DFG: Public Health Research

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<td>Public Health, Health Services Research, Social Medicine</td>
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<td>Dermatology (for the purpose of comparison):</td>
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Source: GEPRIS (DFG)
Purpose of the Meeting*

1) Discuss quality, access and regulatory issues of existing research infrastructures in Germany

2) Define high-quality research criteria to be used in a guideline for evaluating grant proposals

3) Address adequate DFG funding formats

*as suggested by DFG in the invitation letter
Conclusions: Research Infrastructure

- No co-ordinated funding of Public Health Research after initial structural support through BMBF (1992-2000)
- Amount of funding of applied Public Health Research is negligible
- Compared to e.g. USA, UK, Netherland, Denmark there are still (too) few Schools of Public Health in Germany
- Only few major research institutes outside academia that cover prevention or health promotion
- Limited career opportunities for young researchers in Public Health: Few vacancies for senior positions in academia, research institutions beyond academia, or senior administrative posts

In parts from Gerlinger et al. 2012
Conclusions: Public Health Research as a Field

• The initial success has led to sub-specialization in Public Health, e.g. into epidemiology, health services research, health economics

• Sub-specialities differ between their states of development:
  Epidemiology internationally visible and rather elaborated infrastructure (often as part of huge Helmholtz Institutes, RKI, etc.) – in contrast to most of the other sub-specialities

• Public Health Research needs to be seen in the context of the (limited) position of Public Health in Germany (as exemplified by the declining role of the Public Health Services)
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Public Health as a Research Field*

Public health is thereby **multi-disciplinary** and involves subject matter and **methods of a wide variety of academic disciplines**.

This highly multi- as well as **interdisciplinary** approach must be taken into account when proposing research questions, discussing research infrastructure and, of course, **evaluating funding measures**.

*as described by DFG in the invitation letter
Almost absent:

In contrast there are only very few projects which

• are interdisciplinary
• use qualitative methods
• employ mixed methods
• or do interventional research …

in the subject area “Public Health, Health Services Research, Social Medicine”
Types of Projects Funded so far:

- The effect of chloride in swimming-pools on asthma
- Use of sunshades and skin cancer
Types of Projects Missing:

- The impact of introducing free entrance to public pools for young people on the public health
‘On the buses’ evaluating the impact of introducing free bus travel for young people on the public health.

Researchers found that free bus travel increased young people’s ability to travel independently and extended their social opportunities through facilitating extra trips, trips further afield and/or exploratory trips with friends.

Chief investigator: Professor Judith Green, London School of Hygiene & Tropical Medicine
Project ´On the buses´

Methods

- Reviews of the research literature
- Analysis of existing data sets:
  - STATS19 (police records of road injury)
  - HES (records of hospital admissions)
  - Travel diary data
- Individual and group interviews with:
  - 100 + young people
  - 47 older citizens
- Work with young people engaged in work experience programme at LSHTM
Examples for PH-Research Projects Funded by DFG

- Short-term health effects of fine and ultra-fine particle pollution in Beijing, China
  (Observational study)

- Cardiovascular risk factors and diseases in an elderly population
  (Observational study)

Examples for projects funded in the subject area
“Public Health, Health Services Research, Social Medicine”
The potential of Microfinance Institutions to advance progress towards Universal Health Coverage through Micro Health Insurance: A mixed methods study in Malawi (Mixed methods, including an RCT)

Funded in the subject area “Public Health, Health Services Research, Social Medicine”
2) Preliminary conclusion: High-quality Research Criteria and Evaluation Process

To be considered in the evaluation of “On the bus”-type research:

• many conditions cannot be controlled for
• often rather broad study questions
• project might need adaptation during the process
• different methods have different criteria for quality
• evaluation process needs to be integrated, not aggregative

Development of guideline needs to be participatory and should reflect different disciplines and methods pertinent for Public Health
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Funding Formats for Public Health Research at DFG

- 82 projects funded in the subject area Public Health, Health Services Research, Social Medicine
- 80 research grants, research fellowships, clinical trials, single projects as part of a collaborative research centre (SFB)
- 2 research units (Forschergruppen), both on prioritization
- So far no priority programmes, research training groups, or collaborative research centres
One Option: Priority Programme

1) A particular feature of the Priority Programme is the nationwide cooperation between its participating researchers.

2) The DFG Senate may establish Priority Programmes when the coordinated support given to the area in question promises to produce particular scientific gain.

3) As a rule, Priority Programmes receive funding for a period of six years. Once the Senate has established the programme, the DFG announces a call for proposals.

Source: GEPRIS (DFG)
Purpose and Outcomes for Discussion

1) Research infrastructures
   - “Catch-up development” successful in certain areas, however, in general still far behind other countries

2) Guideline on evaluation criteria
   - Criteria and evaluation process need to consider adequately the conditions of Public Health Research
   - Development of guideline needs to be participatory and should reflect different disciplines and methods pertinent for Public Health

3) Adequate DFG funding formats
   - Till now only few funding formats used by Public Health
   - Priority Programme as one option
Thank you for your attention!

Acknowledgement:
I wish to thank Karen Hentschel and Anne Dehlfing for their support in preparing this presentation.

Statement of conflict of interest:
I am the current president of the German Public Health Association.
References


Winslow CE. The place of public health in a university. Science. 62:335-8, 1925.