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Public Health in Germany

Structures, Developments and Global Challenges

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It is time for a new effort to strengthen public and global health in Germany. Public health is the science and practice of preventing disease, prolonging life and promoting health through the integrated and organised efforts of society at all levels. Increasingly this includes not only national action but also cooperation at European and global levels. Examples of successful public health interventions include the following: the reduction of infectious diseases, notably human immunodeficiency virus (HIV), and cardiovascular disease, the protection of non-smokers, and advances in health and safety at work. There have been important breakthroughs in identifying risk factors (behavioural, biological and environmental), improving health system performance and developing sound health-relevant practices. Public health is more than medicine: its implementation requires action across sectors and involvement of the whole of society.

Public health is an important integrative science, translating basic research into better health of populations. Present academic structures for public health research and teaching in Germany are fragmented and, despite continuing efforts and progress, do not always meet national needs and international standards in either scope or scale. Although there are excellent individuals and institutions working in public and global health in Germany, as can be concluded from publication and citation analysis and other indicators, they need increased political support, improved structures and significant research investment.

At the national level, successful public health interventions in Germany have traditionally been built on advances in hygiene and communal welfare systems historically focused on reducing infectious disease. In recent decades this has shifted to action on HIV, and non-communicable diseases, particularly cardiovascular disease and the protection of non-smokers. Germany can be proud of its great public health tradition; however, after the disastrous approach to public health taken by the National Socialist regime, it required several decades for Germany to rebuild a public health commitment.

Today Germany can look back on some major accomplishments in public health. Nonetheless – as in all countries – there are continuing and new challenges from communicable and non-communicable diseases, an ageing population and increased pressures on health-care systems. These contribute not only to the rising costs of health care, but they also incur significant other costs for society. There is a growing need to promote healthy living, to create a supportive environment for individual- and community-based prevention and to address social determinants of health through integrated measures across traditional borders of responsibilities. “Health-in-all policies” has to become a priority in science, in politics and in civil society.

The requirement to strengthen national public health is linked to tackling the challenges of global health. Germany can make an increasing contribution to international cooperation, especially in those areas in which it has significant experience, for example in research, innovation, universal health coverage and social protection. Implementing what we already know from the evidence base can make a dramatic improvement in global health and benefit all countries.

Considering the previous significant contributions of Germany to medicine, health, humanitarian causes and social policy, a more proactive policy of international commitment of Germany is timely. In the area of global health in 2013, the German Government published a statement on its intentions to take up the challenges and make global health a priority of German policy. This was pronounced by the Federal Minister for Health at the World Health Summit 2013 and was highly applauded by the international community. The World Health Summit itself is a testimony to these intentions, since it was supported from the beginning by the German Government and is being held under the patronage of the Chancellor of Germany and the President of the French Republic.

The starting point for this statement is: “Is Germany fulfilling its potential in public health and responding to the global challenges?”.

Analysis based on international comparisons indicates there are current gaps and opportunities: in health promotion and disease prevention, infectious disease outbreak management, analysis of large health data sets, in global health leadership and in responding to advances in science and technology. There is also insufficient communication between policy-makers and academia and there are greater opportunities to use robust evidence to inform policy options. Moreover, German public health research and successful experiences in public health practice have not found their reflection in the global health debate to the extent that they deserve.

We focus our statement therefore on two areas:

- a) how to improve the contribution of academia to strengthen public health outcomes in Germany and
- b) how reformed academic public health capacities in Germany could contribute to a strengthened role at national, European and international levels.

Our messages are directed to academia and its funders and other research institutions, public health professionals, policy-makers across sectors at the federal, *Länder*, county and municipal levels, other parts of the health economy including insurance, pharmaceutical and other commercial sectors, and international partners in the European Union (EU) and global organisations.

Our statement draws on an extensive, very open, broad and in parts controversial public discussion, especially on the outputs of seven workshops organised in 2013.

Our recommendations cover major areas of public and global health and are summarised as follows.

Recommendations

1 Education and training

1.1 Building better connections between academic public health, public health practitioners and society in Germany. Academies can play an important role in initiating and supporting public health programmes at various levels and promoting a spirit of public discussion, for example with respect to new technologies, ethics and strategic orientation. A strong public health service (*Öffentlicher Gesundheitsdienst* [ÖGD]) and adequate training are important factors for a functioning public health system.

Among the actions needed to improve training are the following:

- a) agreeing on coordinated and joint career development objectives,
- b) sharing evidence, expertise and perspectives,
- c) incorporating interdisciplinary and intersectoral thinking to encompass a broad range of disciplines together with teaching skills for research methodologies and
- d) supporting learning for leadership and advocacy.

These activities should also help to raise the esteem of the profession and ensure that careers in public health become more attractive.

1.2 Opening new career paths and providing diversity in the public health workforce at national, European and global levels.

1.3 Organising coherent national provision of education programmes in public and global health with an inventory of quality-assured courses, together with strong commitment to continuing professional development and distance learning including massive open online courses (MOOCs) (in European or international partnership).

1.4 Including public and global health components in the curriculum of all health professionals and other sectors, particularly in the social and environmental sectors and foreign policy. The concept of “health-in-all policies” needs to be included as early as possible in education and training.

2 Research

2.1 There must be new emphasis on interdisciplinary research, while maintaining standards of excellence. This has implications for funding agencies in evaluating research proposals and peer review as well as for the structure of university departments. Public health will need to be developed as a truly interdisciplinary science, and the respective structures to support this need to be established and linked to other relevant German research strengths (for example, the study of climate change). This must be achieved independently of existing faculty boundaries and must avoid fragmentation of research objectives and outputs.

2.2 One major priority is to develop an innovative global health research agenda that reflects the changing burden of disease. Such research should bring together different sectors, areas of expertise and countries to develop effective policies, programmes and strategies to improve health through non-health sector interventions and strengthen health systems.

2.3 There must be a coordinated effort to employ the significant unused potential of randomised trials, cohort and observational studies to answer public health questions.

2.4 There must be more investment in new research areas in public and global health programmes in addition to classical epidemiology and population-based data sets, and in the social and behavioural sciences, for example genomics and other Omics on a population basis.

2.5 More research effort is required to understand cross-cutting issues including the broad field of inequality and social determinants that influence health.

2.6 Current EU legislative efforts to protect personal data and enhance privacy are of considerable importance, but it is also important to set the balance between protection of the individual and the public good of health research and health of society. It is critically important to ensure that EU legislative measures to regulate personal data protection do not introduce new obstacles to health research and improved health.

3 Translation of research outputs and public engagement

3.1 Commitment to translation is essential if research results are not to be wasted. Academia has the role and responsibility not only to generate fundamental and applied knowledge but also to identify and to advise on ways to implement that knowledge for health, policy development, public dialogue and international collaboration, and to evaluate the consequences of new health interventions and policy measures. Academia also has an important role to be a voice of social critique and advocacy for public health.

3.2 Translation in public and global health requires open dialogue and strategic relationships between academic public health, policy, the private sector, the health industry and civil society in Germany, across the EU and globally.

3.3 We strongly recommend increased public engagement in the health debate at all levels, finding new ways for the citizen to access health information and services, and to be actively involved in research. The academies are well placed and have a responsibility to participate in this process because of their structural interdisciplinarity and their independence.

3.4 Germany must also take an active role in the debate on what should be covered by the EU mandate for public health. The academies of sciences and the major research organisations must continue their leading role to mobilise the scientific community to provide the sound evidence base to advise policy makers in Germany, the EU and at a global level.

4 Structural options for reform

There is consensus that academic public and global health in Germany is at a high scientific level but it is too fragmented. To live up to international standards and to reach a further qualitative leap, academic public and global health needs to be independent. Developing a strategy for coordination must build on and further develop the excellence in disciplines already found in the universities and in other institutions, and on the experience in public health practice. The strategy must also capitalise on current developments in the science

base in Germany, on regional strengths in research and teaching and on international experiences and examples of best practice.

Whatever the structural option chosen, it will need to be of high quality, supported by sustained funding and accompanied by a continuous commitment to monitor the impact of reform and to assist the public health community in developing joint responsibility for the important national needs and global challenges. Whatever path will be followed, universities will need to play a strong role. The status quo is not an option.

Among the options for new structures are the following:

4.1 “Public and Global Health Network Germany”

Such a network would strengthen current structures and improve coordination, collaboration, and national and international networking. There would be great value in developing a strategic national competitive funding programme to support this in a competitive merit-based manner. This could be initiated by funding bodies in Germany and should be open to established funding mechanisms including individual grants, special research grants and “clusters”. This competitive funding scheme could be supplemented by grants from the Federal Ministries and from the *Länder*.

Such a competitive process and a detailed strategic analysis of existing or emerging centres may well result in the establishment of three or four major Public Health Centres situated at universities in Germany, bringing together relevant disciplines such as epidemiology, health system sciences, biostatistics, social sciences or medicine. This would certainly provide a new stimulus for the field but it would need an element of coherence and continuity.

The network’s structure could also take advantage of the already existing competences and experience at universities and at established German Centres for Health Research (*Deutsche Zentren der Gesundheitsforschung* [DZG]) with disease orientation by German universities and Helmholtz Centres, as well as the Robert Koch Institute (RKI), and must link with other public health services to create critical mass. It has to be clear that the uni-

versities are important partners; otherwise it will not be possible to obtain one of the main objectives, namely to strengthen public health education and teaching. It will also be crucial to involve from the very beginning the respective planning and advisory institutions at the level of the state and federal governments. In practical terms, it may be feasible to capitalise on the Helmholtz Association of National Research Centres in medical disciplines as well as the Leibniz Institutes, Max Planck Institutes, the Fraunhofer Institutes, federal agencies such as the RKI and others who already have activities and programmes in public health, to provide new partnerships, funding opportunities, coordination and critical mass.

4.2 “German Virtual Institute for Public and Global Health”

This would start with a central virtual coordinating structure including the actors mentioned in item 4.1 to catalyse developments and, in addition, to explore what can be added by EU networking. It may also be desirable to combine elements from the different options: individual centres to lead on particular topics, with a coordinating centre to provide coherence to the framework overall.

4.3 “Institute for Public and Global Health”

An already existing or a newly founded institute takes on responsibility to promote and support public and global health research, teaching and policy in Germany. Other institutions in this field could and should collaborate and network with this institute. Elements from 4.1 and 4.2 can be integrated here.

4.4 “German Centre (or Foundation) for Public and Global Health”

This option would be based on a new, strong central institute, a hub, which would have the important task to support and coordinate an affiliated national network and thereby ensure that support of excellence in research and teaching is assured in all qualifying centres throughout the country, especially in the universities but also involving non-university institutions. Such a structure could and would have to provide more stability than a loose network, special funding programmes or a virtual institute. It should be aimed at a close cooperation of universities, universities of applied sciences, research institutes and the public health service in order to achieve

an efficient transfer of the results and encourage research on public relevant topics. This structure could take advantage of the competences and experience in the science, coordination and governance at universities and at the DZG as well as the RKI. In any case, the universities are important partners to ensure that public health education and teaching are strengthened. It can be envisaged that university departments, working groups or other institutions, even outside Germany, become formal external members of the new centre, including participation in its governance. The different legal structures of the different DZGs as well as that of the Berlin Institute of Health (BIH) should be studied as possible models of governance and funding for such a Centre.

5 Next steps

The strategy to be devised must be sufficiently flexible to cope with rapid advances in science and technology as well as new and growing public health and global health challenges. It must embrace all stakeholders and must ensure that the structural options to be pursued satisfy the criteria and goals set out in our statement. We therefore do not recommend one single option to be pursued but rather aim to initiate a concrete and goal-oriented process that will lead to a widely accepted, new and efficient structure for public and global health.

To reach this goal we recommend the establishment of a national “Public and Global Health Initiative (PGH Initiative)” and immediately to create a PGH Initiative Founding Committee to make the best use of these recommendations. This is urgent in view of the new challenges that will arise from the adoption of the sustainable development goals at the United Nations in 2015. The PGH Initiative Founding Committee should have a broad national and international representation. It should steer forceful action on the basis of the above recommendations within an agreed timetable.

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