



SPHERE

Strengthening Public Health
Research in Europe

SPHERE

- is a 'Specific Support Action' within the Sixth Framework Research Programme of the European Commission, over three years 2005–2007;
- has identified public health research literatures at national and European levels, described how national governments and European institutions support public health research, and disseminated the findings; and
- is a consortium of European partners, led by the UK Faculty of Public health in collaboration with the European Public Health Association (EUPHA).

SPHERE has worked through three activities:

- bibliometric studies of European public health research *literatures* in the period 1995–2005, for the research field overall, six specialist public health areas and a separate study of French databases;
- describing public health research *arrangements*, from national ministries of health and research, European institutions, NGOs, researchers & allied research organisations; and
- discussing *implications*, and dissemination through the European Public Health Association and Global Forum for Health Research.

Public health research literatures

Public health research

- is undertaken at the population or health service level (compared with biomedical and clinical health research at laboratory and patient levels);
- is designed to gain generalisable knowledge, although this may be with a specific health system or context being researched;
- is often goal-oriented, with policy-relevance, and may be published in either academic journals or institutional reports;
- uses a range of observational methods, including surveys, registers, data-sets, case-studies and statistical modelling; and
- draws on disciplines including epidemiology, sociology, psychology and economics, and interdisciplinary fields of environmental health, health promotion, disease prevention, health care management, health services research and health systems research.

Background

Public health practice – managing systems for prevention and curative health care, changing lifestyles and promoting health in public policies – has major impacts on population health. Europe has a long history of public health research, with different countries and regions emphasising different priorities for cultural and historical reasons.

Policy-makers, public health practitioners and the wider community need evidence from public health research for effective decision-making. Equally, public health researchers need close collaboration with other stakeholders in choosing priorities and achieving relevant research – especially research for policy implementation.

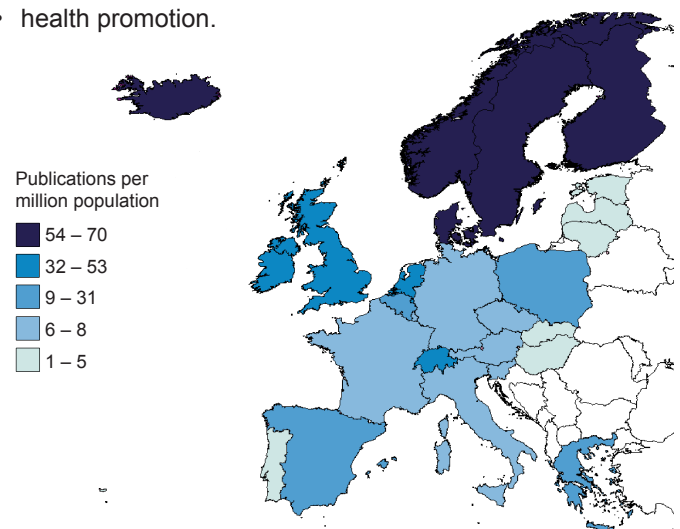
The European Commission has proposed a unified European Research Area for all research fields, and devoting 3% of GDP to research (both public sector and private). Public health research is needed as R&D support for public health practice.

Public health research operates at a complex level between scientist, individuals and society, and therefore requires a collective response. **SPHERE** was created in an effort to explore and further our understanding of these issues.

Literatures reviewed

Research papers published by European public health researchers were analysed with bibliometric methods in the following six specialist topics:

- health services research;
- environmental protection;
- genetic epidemiology;
- health management;
- communicable disease control; and
- health promotion.



Annual average rate of all public health publications

Findings

Bibliometric overviews of total public health papers and the specialist topics showed:

- the annual number of public health research publications in Europe has been rising, and over the 10 years 1995–2005 averaged 7,000 papers a year, compared with a global total of 20,000;
- there were more papers on environmental health and infectious disease control in central and eastern European countries, while health services and management research, using social science methods, and genetic epidemiology and health promotion were more frequent in northern and western countries;
- Nordic countries have the highest rates of public health research output per capita, and new member states, with Portugal, the lowest;
- most publications are in English, and usually not above 20% in own languages where not English; and
- public health social science literature is less likely than biomedical sciences to be published in journals or identified through medical science literature searches.

Public health research arrangements

Using surveys, literature reviews, visits and discussions, understanding of public health research was gained from European institutions, national ministries of health and of science, and national public health associations and NGOs. 'EU15' are EU countries before 2005, 'New member states' are the 10 countries joining EU in 2005.

Findings

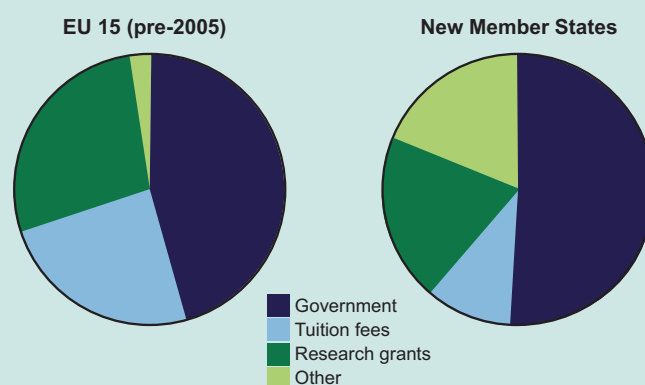
- there are wide differences in national structures for supporting public health research;
- generally, ministries of science support biomedical research, while ministries of health support public health research. However, there is not sufficient dialogue between these ministries at national level;
- representation for health sciences at European level is much stronger for biomedical (including commercial) and clinical (disease) research than for public health research;
- despite the substantial product from European public health researchers, national ministries of health have little knowledge of European health research policy, and do not exchange information on each other's research programmes;
- the new member states produce fewer publications per year than the EU 15 countries, and have less engagement of NGOs. However, old and new EU member states show less difference in support by Ministries, public health priorities or funding in training institutions; and
- USA, Canada and Australia all have public health research programmes at federal level, and support state and regional research. But structures and priorities differ, and – as in Europe – biomedical and clinical research receive more government and commercial support than public health research.

Ministries of health and ministries of science

Responses from 38 ministries in 24 EEA countries:

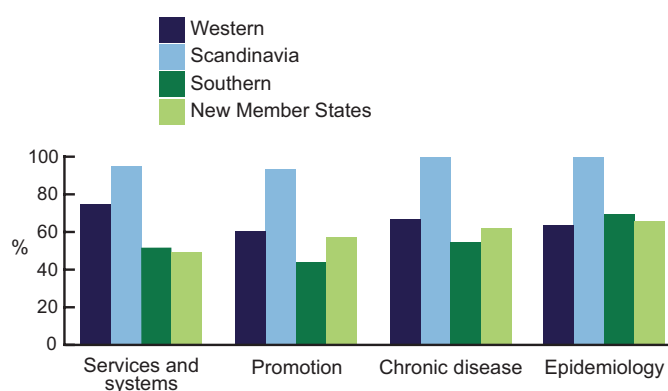
- public health research priorities were poorly defined;
- ministries have different degrees of interaction and participation of researchers, funders and society;
- financial decisions for public health research were more important than priority setting;
- ministries had difficulty identifying available funds;
- no strategies exist to determine if research findings, or best practices, are being implemented; and
- many national agencies are 'knowledge translation platforms' rather than formal research commissioners.

Training institutions



Sources of funding for public health research training institutions

National public health associations



Public health research priorities of national public health association

Non government organisations

Responses were gained from 73 organisations in 22 European countries:

- half of all citizen organisations that responded listed advocacy, networking, health promotion, health protection and human rights as the main content of their work;
- 81% of respondents worked at national level and 14% at international level;
- 34% had been involved in international collaboration; and
- the highest priorities for future public health research *nationally* were public health, environmental health and tobacco, and *internationally* were public health, environmental health, health care systems and reforms financing access.

Public health research implications

Findings

SPHERE has shown that public health research in Europe is at globally competitive levels. But the quality and relevance of research needs further assessment.

All European countries should have public health research programmes to match their national health policies and priorities, and develop models of good practice in commissioning research and appropriate infrastructures.

Coordination between ministries of health and ministries of science at national and European levels needs to be improved.

To achieve a European Research Area for public health, there should be a clearing-house and register of public health research calls, researchers and institutes.

Comparative research, using policy and practice variations across Europe, should be prioritised by EU funding.

Questions

SPHERE raises further questions on public health research:

- is enough, and good enough, research being done to meet the health priorities and needs of European member states?
- can research commissioning be used to direct research to fields where there are greatest health needs, or where greatest benefit can be achieved?
- how generalisable is public health research between different countries?
- how can research funders direct research to the policy/fiscal governmental level where health benefits may be greatest?
- can comparative studies be used to investigate the impacts of national policies (for example in trade, environment, infectious disease control, population mobility) on health differences?
- how can public health researchers and NGOs better contribute to setting research agendas?

Conclusions

SPHERE recommends greater coordination and discussion between public health researchers, research users and research commissioners, working at national and European levels.

More knowledge and exchange on health research is needed between European countries, and new collaborative studies to learn from the national differences in health policies and public health practice.

A European Public Health Research Area should be created.

Participating Institutions:

UK Faculty of Public Health; University College London; European Public Health Association; Catholic University, Rome; National School Public Health, Lisbon; Kaunas University of Medicine; Lithuanian Public Health Association; Public Health Resource Unit, Oxford; National School Public Health, Rennes; European Public Health Centre, Northrhine-Westphalia Institute of Public Health; European Public Health Alliance; Slovak Public Health Association; National Institute for Health Development, Tallinn; Nofer Institute of Occupational Medicine, Łódź; NIVEL, Utrecht; University of Debrecen; University of Durham; Università degli Studi di Genova; University of Warwick.

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SIXTH FRAMEWORK PROGRAMME

