Commentary on SPHERE (Strengthening Public Health Research in Europe) literature reviews

F. Kamper-Jørgensen

SPHERE is a good initiative, comparing public health research production in Europe with the rest of the world as well as between countries within Europe. The initiators and participants of the project are to be congratulated on this news-breaking approach. The project has been conducted with a fairly high level of ambition, and I am impressed with the studies in which public health research publications in Europe have been assessed by country, by gross domestic product, by population and by health needs measured using DALYs. The work acknowledges the limitations of a bibliometric analysis. Such limitations for general conclusions on public health research in Europe are discussed later. I divide my comments into three aspects of the work: methodology of the approach; conclusions drawn; and future research

Methodology

When considering the results of SPHERE we have to be aware of the methodological limitations embedded in the work. Generally recognizing the sound approach of the work, I have chosen to concentrate on criticism and to describe areas either where SPHERE work could be strengthened, or where further work is needed

Consistency of definition

I was struck by the fact that different definitions of public health research appeared to be used by the different SPHERE reports and to some extent different search strategies of the literature. Although each of the projects was investigating a different topic area, these different definitions, may of course, affect the results.

Exclusion or inclusion of epidemiology

I consider epidemiology the traditional and still important core-discipline of public health and public health research and I was concerned that there was no SPHERE report on epidemiology. Epidemiological aspects were included in the reports on genetic epidemiology, environmental health, infectious diseases, etc. but there was no overall SPHERE report on epidemiology. Had I myself been included in SPHERE, I would have strongly advocated a separate report on public health research-related epidemiology.

Exclusion of grey literature

Most of the reports included peer-reviewed research, original research and electronic-reported publications through databases such as PubMed, etc. This excluded reports, grey zone literature and descriptive research and meant that this SPHERE work did not catch:

- PhD reports—books and academic dissertations.
- Articles on the design of studies which mostly end up in grey literature reports.
- International, national, regional and local public health books and reports often containing broad research-based knowledge and reviews of Public Health Research e.g. from WHO, EU, UNESCO.
- Descriptive and analytic health statistics from statistical offices.

Systematic collection of information from each country's use of country informants

Another concern is that country informants were not systematically included in the study. In Scandinavia, most countries have a unique possibility to link databases on individuals in order to create population-based linked materials for research. In my own country, Denmark, we have a 10-digit personnel number which is used for creating research materials based on extensive linkage of population-based registers on mortality, cancer, hospital contacts, socio-economic events, socio-economic situation, child day care, education, labour market participation, unemployment, occupation, etc. Such information I consider of great value in an analysis of strengths and weaknesses of European public health research. Solely using electronic databases eliminates country informants contributing with knowledge as presented above.

Reviews and systematic reviews

An important question related to public health research is: What is the purpose of research? Is it: (i) Solely to create new knowledge? (ii) Also to create systematic reviews by special methodologies? (iii) Also to create knowledge and reviews supportive to change of health policy and public health? I hold the opinion that public health research includes all three of these questions. If reviews and especially systematic reviews are omitted in search strategies for public health research, serious biases may be introduced in our understanding of past and current public health research. I am concerned that some of the bibliometric analyses as described in this supplement may exacerbate such bias by omitting reviews from some search strategies.

Conclusions

Some over-riding conclusions are evident from the work. Europe is an important producer of public health research. And it appears that public health research does not necessarily focus on important health needs at the health topic level. However, if the literature search had included the grey literature I believe that this conclusion might be somewhat modified. Although public health research focuses on inequalities, this is mainly on the descriptive epidemiology of those inequalities. We know that social inequalities, gender inequalities and geographical inequalities exist, but analytic research
to explain mechanisms is scarce and intervention research almost lacking. And one of the striking conclusions from the work was the marked under investment in public health management research.

Future of public health research in Europe

I understand that the next phase of the SPHERE project will be to recommend and present proposals as to future public health research—a constructive way to aid the further development of public health research. My own recommendations include that there should be:

- more balanced research to allow for the understanding of big health problems and their determinants. We know a lot about biomedical factors related to health and disease but too little about the dynamic inter-relationships between living conditions, life style, health and morbidity;

- more intervention research and systematic evaluation of trials in order to produce research that can deliver change.

Acknowledgements

SPHERE (coordinator Prof. Mark McCarthy) was funded by the European Commission Sixth Framework Research programme, during the period 2005–07. This review comment was presented at the 14th Conference of the European Association for Public Health (EUPHA), Montreux, Switzerland, 16 November 2006.

Conflict of interest: None declared.

Received and accepted 6 June 2007