# PUBLIC HEALTH RESEARCH PRIORITIES IN EUROPE SEEN BY NON-GOVERNMENTAL ORGANIZATIONS

Gabriel Gulis<sup>1</sup>, Lara Garrido-Herrero<sup>2</sup>, Zuzana Katreniakova<sup>3</sup>, Gabrielle Harvey<sup>4</sup>, Mark McCarthy<sup>4</sup>

<sup>1</sup>University of Southern Denmark, Niels Bohrsvej, Esbjerg, Denmark (in project on behalf of the Slovak Public Health Association – SAVEZ) <sup>2</sup>European Public Health Alliance, Brussels, Belgium

<sup>3</sup>Department of Social Medicine, Medical Faculty, University of PJ Safarik, Kosice, Slovakia (in project on behalf of the Slovak Public Health Association – SAVEZ)

<sup>4</sup>Department of Epidemiology and Public Health, University College London, London, UK

#### **SUMMARY**

Background. Public health research is concerned with population health, determinants of health, health systems research, health promotion, environmental health, health protection, disease prevention and research in other fields of public health. During the last decades, non-governmental organisations (NGOs) are more often entering the field of public health research. This paper presents results of work within SPHERE (Strengthening Public Health Research in Europe), a European Commission funded study aimed to gather information and produce knowledge on the state of public health research in Europe.

*Methods.* A questionnaire survey was developed and conducted among NGOs enrolled in a database held by the European Public Health Alliance (EPHA). There were 80 replies, and the response rate for NGOs that were members of EPHA was 53%.

Results. There were no significant statistical differences in the responses when analysed for three European groups ['old' member states (EU 15), accession members states in 2004 (EU 10) and EU-associated countries]. The NGOs reported a relatively large international experience, expressed by participation in international public health research, and more often practice work. The main research priorities reported were general public health, environmental health, ADHD, obesity, nutrition, tobacco control. NGOs showed low correlation between their work field and their proposed public health research priorities.

*Conclusion.* There are growing numbers of NGOs in Europe concerned with public health. This survey indicates their interest also in public health research priorities.

Key words: varicella zoster virus, seroepidemiologic studies, immunity, vaccination, public health policies

Address for correspondence: G. Gulis, University of Southern Denmark, Niels Bohrsvej 9-10, 6700 Esbjerg, Denmark. E-mail: ggulis@health.sdu.dk

# INTRODUCTION

Public health research is concerned with population health, determinants of health, health care systems, environmental health, health promotion, health protection and disease prevention. It complements biomedical research, which is concerned with biomedical mechanisms of disease and medical treatments. In contrast to the laboratory or clinical level of biomedical research, public health research is undertaken at population level. The Global Forum for Health Research defines three main categories of health research - strategic research, biomedical research and behavioral research (1). Public health research, in the meaning of this paper comprises strategic and behavioral research. Public health research, as public health practice, aims to be intersectoral. A contemporary challenge for public health research is to integrate the capabilities of different academic disciplines to address policies for health on one side, and to improve implementation of research results on the other side. As well as standard public health research institutions, such as national public health research institutes, universities, public and private sectoral research institutes, non-governmental organizations have entered the public health research field during the last decades.

The term **non-governmental organization** (**NGO**) is used in a variety of ways all over the world and, depending on the context in which it is used, can refer to many different types of organizations. In its broadest sense, a non-governmental organization is one that is not directly part of the structure of government (2). Often, NGOs bring together people with different expertise but a shared interest to act on a common good. Public health area is not an exception. However, most of public health related NGOs focus on public health field-work, practice, advocacy, and at some extent policy development.

SPHERE (Strengthening Public Health Research in Europe) is a collaborative study supported by the European Commission's Sixth Framework Research Programme (3) which aims to gather information and produce knowledge on the recent state of public health research in Europe. One work package in SPHERE focused on NGOs and their view of recent and future public health research priorities in Europe. This paper presents the results of this part of the study.

### **METHODS**

Collecting information on NGOs engagement in public health was carried out by:

- · developing a questionnaire for data collection,
- identifying and contacting non-governmental organizations using the database of the European Public Health Alliance (EPHA), and a request to forward the questionnaire to other potentially interested NGOs.

The questionnaire was prepared and discussed by the two organizations involved in the project work package – the Slovak Public Health Association (SAVEZ) and EPHA. The questionnaire was sent out by email approximately to 1,500 contacts including the following: EPHA members (150 contacts), members of the European Health Policy Forum (47 contacts) and EPHA contacts in CEE countries (1,300 contacts).

A few months later, the questionnaire was re-sent to the same database contacts, which had been increased in size during those months due to new additions from Romanian NGOs and new EPHA members. The total recipients including the second wave were around 1,600 contacts.

It is very hard to express a response rate due to different sources of contacted NGOs. Taking in account only NGOs in EPHA database (150) the response rate is quite high, about 53%. On other side, considering the whole number of about 1,600 contacted NGOs the response rate is low. The truth might be closer to the first calculation; the EPHA database likely contains NGOs who are really active in the field of public health.

Statistical analysis was focused on country groups comparisons – the EU15 (EU countries before May 1st 2004), EU10 (those countries who joined EU at May 1st 2004) and non-EU countries. Simple descriptive statistics were used to describe differences between country groups (mean values, P-values). To assess correlation between working area of an NGO and proposed priorities, Pearson's correlation coefficients calculation was used.

## RESULTS AND DISCUSSION

Filled questionnaires were received from 80 different organizations in 28 European countries, 71 of them were NGOs. The remaining 9 responses came from organizations who changed their status to other entity as NGO over time. Respondents came from all around Europe. The following shows the geographic distribution of received responses by countries:

- EU27 (15+10+2):
  - UK 5, Belgium 5, Germany 3, the Netherlands 3, Greece 3, Austria 3, Ireland 3, Italy 2, Sweden 2, Luxembourg 1, Spain 1 total 31
  - Cyprus 6, Slovenia 4, Czech Republic 3, Hungary 3, Poland 3, Slovakia 3, Estonia 2, Latvia 1, Lithuania 1, Malta 1 – total 27
- Non EU:
  - Macedonia 5, Armenia 2, Turkey 2, Switzerland 1, Croatia 1, Norway 1, Serbia and Montenegro 1 – total 13

The mean duration of existence of NGOs that participated in the survey is 18.3 years (standard deviation 23.3 years). The median of 14 years reflects that the mean is slightly shifted toward higher values by couple of older, long time existed NGOs. Table 1 presents the duration of existence by year groups.

Table 1. NGOs' duration of existence and numbers of NGOs

Years of establishment of NGOs (up to 2005)	Number (%) of respondents
0–5	17 (24.7)
6–10	13 (18.8)
11–15	15 (21.7)
16–20	10 (14.5)
>= 21	14 (20.3)
Total	69 (100)

Table 2 shows the number of respondents in different groups, depending on the work fields that the NGOs were concerned with. Only those respondents that answered this question are included. It is of note that only four of the respondents listed research as one of their main fields of work.

Looking at work fields by membership in EU country groups (EU15, EU10 and non-EU) no statistically significant difference was found (P=0.56).

Population health, environmental heath, attention deficit hyperactivity disorder, health and social care, mental health, cancer, and complementary and alternative medicine were the most frequent working areas reported by the NGOs. There is no significant difference in work fields between EU country groups (EU10, EU15, non-EU) (P=0.76).

Considering the level on which NGOs activities are focused, 81% of responding NGOs work at national level, 14% at international, 3% at regional and only 2% at local level.

About 52.2% of responding NGOs (n=37) claimed that they had experience working at international level, while 47.8% claimed no international experience (n=34). Respondents reported having international experience on the following areas: consultancy services, collaborative projects, organizing and participating in international workshops, and attending meetings abroad.

NGOs presented a reasonable international experience in terms of membership in international networks of NGOs. Some of the respondents declared quite a higher number of developed partnerships, for example one NGO claimed membership in 10 international NGOs networks. In general, 51 NGOs reported membership in more than one international network or organiza-

Table 2. Workfields indicated by NGOs

Work fields	Number (%) of respondents
Advocacy, networking, field work	12 (26.7)
Health promotion activities (health and human rights protection)	10 (22.3)
Provision of services (care of people with disabilities, chronic illness, etc)	9 (20)
Training	6 (13.3)
Research	4 (8.9)
Awareness raising campaigns	2 (4.4)
Financial support (donors, provision of grants)	1 (2.2)
Standard setting	1(2.2)
Total	45 (100)

tion. This number is higher than the number of NGOs with international working experience because some NGOs are members of international networks but do not have yet significant international working experience. The mean number of memberships was 2.3 (standard deviation 2.4, median 2). There is no statistically significant difference in network memberships in country groups comparisons (P=0.42). Most of the newest or less consolidated NGOs (specially in the new EU member states) are aware of the importance of international work and the importance of being a member of international networks in order to gain recognition at national level (recognition as reliable stakeholders by their government or Parliament, and increased attraction of independent funding).

Each of the NGOs which had experience working at international level reported its participation in at least one international project. Most of the NGOs are involved in one or two international projects, only one NGO claimed to be involved in 8 international projects and another one was involved in 9 projects. The nature of NGOs (normally small and poorly resourced) explains the tendency to be involved in one or two projects at the time.

**Table 3.** National and international level public health research priorities

Public health research needs	National	Interna- tional	
Public health, population health	11	9	
Environment and health	6	5	
Attention deficit hyperactivity disorder	5	2	
Obesity, nutrition	5	6	
Tobacco	4	4 5	
Ageing	4 4		
Cancer	4	2	
Awareness research	4	4	
Economic, social determinants of health	4	2	
Mental health	3	5	
Injury prevention	3	2	
Smaller size research	3	4	
Sexual and reproductive health	2	3	
Hospital care, palliative care, post-hospital and home care	2	0	
Pharmaceutical products	2	1	
Behavioral health	2	0	
Health care systems, reforms, finances, access	2	6	
Private sector collaboration	2	0	
Child safety, violence	2	1	
DALY, burden of disease	2	0	
Health education, promotion	2	2	
Drug use, injecting drug use	1	1	
Diabetes	1	0	
Medical education	1	2	
Cardiovascular disease	1	1	
Meningitis	1	0	

Table 3. (continues)

Public health research needs	National	Interna- tional	
Human rights	1	1	
Rheumatism	1	1	
Allergies	1	1	
Rare diseases	1	0	
HIV/AIDS	1	0	
Rural health	1	1 1	
Anemia	1	1 0	
National health surveys	1	0	
Health inequalities	1	0	
Scientific writing	cientific writing 1		
Efficiency of Chinese medicine	1	1	
Asthma	1	1	
Physical activity	1	0	
Cost effectiveness of prevention, treatment	1	4	
Community resilience	1	0	
Patient registry	1	0	
Quality improvement	1	0	
Health and social care	1	0	
Nursing, midwifery 1		1	
Lifestyle			
Implementation research	entation research 0 3		
Health and social care	0	3	
Based on WHO recommendations	WHO recommendations 0 1		
Data collection systems	a collection systems 0 1		
Support to South East Europe	0	1	

The main objective of this research was to find out about the opinions of NGOs regarding the priorities for public health research. In most cases, the respondents listed more than one priority. Table 3 shows the priorities.

There is a high level of comparability in national (regional) and international public health research priorities as seen by NGOs.

There were no statistically significant country groups differences for both, national and international public health research priorities (P-values were 0.28 and 0.36, respectively).

A correlation was also investigated between the work field of a NGO and its stated research priorities. The purpose of correlation calculation of two relatively independent variables was to check whether they are indeed independent; to check whether NGOs see their on work area as a main research priority or they look rather broader to national and international public health research needs. Pearson's correlation coefficients were 0.21 and 0.26 comparing national and international research priorities and work area of NGO. This suggests that NGOs do not focus on their own field only; they seem to be rather objective and independent.

Table 4 presents international public health research priorities of NGOs by country of origin.

Table 4. International research priorities by country of origin

Country	International public health research needs
Armenia	public health system research, enforcement, environmental health, biomonitoring
Austria	smaller size research, mental health, efficiency, implementation research
Belgium	mental health, tobacco control, abuse prevention, patient safety, obesity, nutrition, aging, medical education, harmonization of European health care system, intersectorality
Croatia	implementation research
Cyprus	epidemiological research to cover areas not yet studied, rheumatism, general public health, determinants of health, awareness campaign
Czech Republic	efficiency of tobacco control measures, smoke free life, evaluation research, health care provision across EU, efficiency of Chinese therapy, allergic asthma, dysmenor- rhoea, sterility problems
Estonia	knowledge management, knowledge sharing
Germany	pharmaceutical research, access to medicines, public private partnership, financing, ADHD (Attention Deficit Hyperactivity Disorder)
Greece	mental health, aging, best in public health
Hungary	global data collection, organization, publicity, distribution, financial support, environmental health
Ireland	ADHD in international research, data collection, genetic, epidemiological situation in all countries, environmental health, health impacts of genetically engineered food
Italy	ADHD in international research, data collection, genetic, epidemiological situation in all countries, health care provision across EU, tobacco, alcohol, mental health, technology, violence
Latvia	possibilities for smaller societies to take part of programs
Lithuania	allergies
Luxembourg	pregnancy, birth conditions, infant nutrition
Macedonia	health education, patient rights,
Norway	lifestyle related studies, addiction and sources of addiction, differences in Europe
Poland	health care provision across EU, tobacco control, health determinants, lifestyle and health, health impacts of multiple exposures, allergies, genetic polymorphism and diseases
Serbia and Montenegro	aging, rural health, women
Slovakia	healthy lifestyle, cancer prevention, health care provision across EU, scientific publication quality improvement network
Slovenia	aging
Spain	sports, occupational health, schools, new health professionals
Sweden	N.A.
Switzerland	link of epidemiological research and health policy
the Nether- lands	obesity, physical activity, intersectorality, injury surveillance and injury data exchange in Europe, good practices in safety promotion
Turkey	reproductive health, gender discrimination, child abuse, human trafficking, nutrition and obesity, elderly health
UK	public health benefits of drinking water, research into quality and effectiveness of public information, healthcare profes- sional education on rare diseases and client satisfaction

### **CONCLUSIONS**

NGOs are organizations that are very vibrant, active and under constant change. In the present research, one of the hardest points is therefore to assess its representativeness. The usual measure of questionnaire surveys, response rate, is hard to apply because of the constant change. However, looking at geographic distribution, we gained wide coverage of countries, from Armenia to Ireland and from Cyprus to Norway. There were also no statistically significant differences among EU15, EU10 and non-EU countries. The responses showed significant international experience of the NGOs, including networking, collaborative project work and international consultancy. The work fields of NGOs seem to be often monothematic, focusing on a single public health issue. However, they identified a broad range of research priorities, both on national and international level. The low correlation between the NGOs' own work field and their stated research priorities indicates a broad perspective on public health: NGOs do not focus only on their own fields, but look into future and to needs of population.

Comparison of public health research priorities suggested by NGOs with the first call for public health research of European Commission's Seventh Framework Research Programme (4), and the Community Action Plan for Public Health of the Directorate for Health and Consumer Protection(5) indicates a relatively high level of agreement in themes.

## Acknowledgement

SPHERE (Strengthening Public Health Research in Europe) was supported by the European Community Sixth Framework Programme 'Scientific Support to Policies'.

#### REFERENCES

- Ghaffar A, de Francisco A, Matlin S, editors. The combined approach matrix: a priority setting tool for health research. Geneva: Global Forum for Health Research; 2004.
- Wikipedia [homepage on the Internet]. Non-governmental organization [cited 2007 May 6]. Available from: http://en.wikipedia.org/wiki/Non-governmental\_organization.
- UCL Department of Epidemiology and Public Health [homepage on the Internet]. SPHERE Strengthening Public Health Research in Europe [cited 2008 Jan 9]. Available from: http://www.ucl.ac.uk/public-health/ sphere/spherehome.htm.
- Clarke A, McCarthy M, Alvarez-Dardet C, Sogoric S, Groenewegen P, Groot W, et al. New directions in European public health research: report of a workshop. J Epidemiol Community Health. 2007 Mar;61(3):194-7.
- CORDIS: Community Research and Development Information Service [homepage on the Internet]. The Seventh Framework Programme (FP7) [cited 2007 May 6]. Available from: http://cordis.europa.eu/fp7/home\_en.html.
- Public Health Executive Agency (PHEA) [homepage on the Internet]. Call for Proposals 2008 [cited 2007 May 6]. Available from: http://ec.europa. eu/phea/calls/call\_for\_proposals\_en.html.
- http://cordis.europa.eu/fp7/home\_en.html, accessed May 6, 2007
- http://ec.europa.eu/phea/calls/call\_for\_proposals\_en.html, accessed May 6, 2007.

Received March 19, 2008 Accepted June, 2008