The Role of the Public Health Official in Communicating Public Health Information

Enrique Regidor, PhD, Luis de la Fuente, PhD, Juan L. Gutiérrez-Fisac, PhD, Salvador de Mateo, PhD, Cruz Pascual, BSc, José Sánchez-Payá, PhD, and Elena Ronda, PhD

The prevailing views on the role of public health professionals refer to professionals in the academic world, without taking into account the fact that many public health professionals are government employees. For example, the American Public Health Association states that public health professionals play an active role in communicating public health information to nonscientific audiences, such as the general population or the mass media.

We propose that public health officials have an important responsibility to promote the practice of public health. However, they must do so within the bureaucracy. Any actions that public health officials wish to take as advocates of particular public health activities should be carried out independent of their role as government officials. (*Am J Public Health*. 2007;97:S93–S97. doi:10.2105/AJPH.2006.094623)

ONE OF THE GOALS OF PUBLIC health is to communicate health information in such a way that it can be interpreted appropriately by individuals and society. One need only recall several articles on public health surveillance in the United States published at the end of the last century. These articles state that local and state health departments, as well as various governmental public health agencies, have traditionally disseminated their public health findings and surveillance information through reports of state and local health departments, federal publications like the *Morbidity and Mortality Weekly Report*, and peer-reviewed public health and clinical journals. At the same time, however, the authors of these works recognize the need to change the way such information is disseminated so that it reaches different users in the most appropriate way.[1–4]

These articles propose that the dissemination of public health findings and surveillance information requires previous identification of the audience and taking advantage of all channels of communication to assure that the information is communicated and marketed—not merely disseminated—to those who need to know. The different groups of users to whom they refer are public health practitioners, physicians, policymakers, the general public, laboratories and other health care providers, the mass media, and researchers, whereas the spectrum of communications options includes, in addition to the publications mentioned, electronic channels, broadcast media, print media, and public forums.[3,4]

The authors of these proposals recognize that communication is a loop involving at least a sender and a receiver. But although they clearly identify those who are the receivers of the information—those who need to know—they do not do the same with the senders. The incorporation of new audiences and channels of communication that have not traditionally been included in the communication of surveillance results raises great uncertainty about the role that these authors assign to public health officials. These works do not make it sufficiently clear whether the information is to be disseminated by the health department or government public health agency or by the person or public health official responsible for surveillance of each health condition being monitored. The impression given is that the health department or government public health agency is embodied in the public health official.

PERSONS RESPONSIBLE FOR COMMUNICATING HEALTH INFORMATION

This ambiguity was resolved in 2002 when the American Public Health Association published a book titled *Communicating Public Health Information Effectively. A Guide for Practitioners*.[5] The authors stated that 1 of the main activities of public health professionals is to convey public health information to different users. In the preface they noted that the book is aimed at public health professionals—those in the academic world as well as government employees—including persons in both the private and public sectors.

The authors mentioned some typical examples to show why public health professionals need to acquire skill in communicating information to nonscientific audiences, such as the general population or the mass media. They mentioned the relatively frequent situation in which public health professionals find that they must express the level of risk to a community whose residents are convinced that the increased risk of a certain type of cancer is caused by the presence of a nearby factory or the typical case of a journalist calling to ask how many people have been affected by food poisoning in a famous restaurant and which food was responsible. In this regard, the objective of the book is to teach public health professionals to communicate public health information to nonscientific audiences.

Public health information, as used in this book, is a broader term that encompasses data but also includes interpretations and recommendations based on scientific knowledge.[6] For the authors, public health professionals convey information with 2 purposes in

mind: to inform and to persuade. Informing means providing factual information with no intent of influencing a decision. Persuading refers to using information to help change opinions, attitudes, or behaviors and is probably the most common purpose for communication in public health practice. Examples of persuasion in public health are legion, such as encouraging smoking prevention and cessation, condom use, early prenatal care, prevention of driving under the influence of drugs or alcohol, or the immunization of young children.

PUBLIC HEALTH OFFICIALS AS SENDERS OF INFORMATION

These proposals are likely to come as a surprise to most public health professionals who work as public health officials in developed countries. We use the term "public health officials" to refer to individuals employed by local, regional or state, and national or federal health departments or government health agencies, who have attained their position in open competition or by contract through a public examination based on professional merit. We do not refer to politically appointed high-level administrators or similar (directors general) or to the elected executive. We also exclude appointed public health officials who comprise the first step in the decisionmaking hierarchy and who, because they serve at the pleasure of the executive, may be removed from their posts at any time—almost always when the person or their program is out of favor with the executive. Occasionally an appointed public health official is also the only local health department employee.

One of the functions of public health officials is to communicate public health information provided by surveillance and health information systems to policymakers, health care providers, and the administrative agencies involved in the control of public health problems. However, in our opinion, it is not the task of the public health official to answer a journalist, private citizen, or deputy of parliament who asks about the frequency of a disease. And the same can be said of a situation giving rise to social alarm because of the unexpected emergence of a public health problem. Faced with a problem of disinfecting the city drinking water or of an unexpected increase in the number of deaths, the pharmacist who monitors the physical and chemical properties of the drinking water or the statistician who monitors mortality are not the ones who communicate this information to the population or to the media. These public health officials, as part of their professional activity, gather data and transmit the information to their immediate superior. However, the decision of whether or not to make that information public is the responsibility of those who represent the department at the institutional level.

Similarly, it is not the responsibility of the public health official to convey recommendations to persuade the population to modify certain kinds of behavior. Public health officials transmit to their superiors the scientific evidence that is important for decisionmaking. It is those who are institutionally responsible who make the decision of whether or not to recommend a particular series of measures, based on a wide array of scientific, cultural, economic, political, and ethical considerations. Public Health Officials also should not try to persuade members of legislative bodies. As Brownson and Malone[7] remind us, persuasive communication efforts on the part of governmental employees toward legislators cannot occur without the permission of a higher-level administrator or an elected executive.

The role and obligations of public health professionals depend on their profession and, above all, on the work setting; working in a government health department is not the same as working in a university or a public-sector research organization. However, neither of these 2 characteristics is considered in the prevailing views in journals and other publications dedicated to the exchange of knowledge related to public health practice. It is not surprising that young professionals who join public health civil service in developed countries express considerable uncertainty as time goes on when they compare their own daily professional practice with what they read about in these journals. This uncertainty or confusion is legitimate considering that public health officials in these countries represent the largest part of the workforce dedicated to this professional activity.

VIEWS ABOUT PUBLIC HEALTH PRACTICE IN SPECIALTY JOURNALS

In specialty journals, 2 characteristics define the views about public health practice: a reductionist conception of public health practice and the idea that public health professionals should act as advocates regardless of their work setting. For example, Susser and Susser,[8] in an essay on the scientific paradigms of epidemiology, note that a basic function of schools of public health is to socialize students through the transmission of traditional public health values. In this way, epidemiologists will keep alive the idea of improving the public health as a primary value. They believe that epidemiologists must be scientists but also professionals in the traditional meaning of medicine, law, or the clergy: society confers on them an autonomous and privileged function based on their specialized training, but this autonomy carries with it reciprocal obligations of service to individuals and to society.

Wall[9] also states that, "what the doctor is to patients, the epidemiologist is to society," whereas Savitz et al[10] add to this idea by reminding us that public health is far too complex to be considered merely applied epidemiology. They suggest that the term "public health worker" should be substituted for "epidemiologist," because it is the public health worker who accumulates information on society's illnesses, develops a plan for treatment, and implements needed therapy. Weed[11] also views epidemiology as a profession similar to that of medicine or the clergy. The ethical code of physicians or the clergy, as persons who possess specialized knowledge, involves the obligation to help others. In the case of the epidemiologist, the core of professional practice is a promise to help society by preventing disease and promoting health. Subsequently Weed and McKeown[12] use these ideas in referring to public health practice in general.

These opinions reflect a reductionism in the conception of public health practice by identifying it with epidemiology—and only in the academic world—but especially by considering it similar to the practice of medicine and other liberal professions. The existence of an ethical code in a profession requires a clear demarcation of its role and obligations but is also influenced by technical skill and daily practice. Medical practice contrasts sharply with the large variety of activities and disciplines that are part of public health practice, such as: monitoring the condition of pipes that conduct drinking water and sewage, surveillance of levels of atmospheric contamination and of environmental noise, supervising city garbage collection, inspecting food sold in markets, setting hygienic–sanitary standards of habitability in homes, managing home health care for the disabled, monitoring the prevalence of behaviors that pose a risk to health, estimating indicators of health status based on population health statistics, establishing norms for approval by parliament about maximum levels of blood alcohol in drivers, and so forth. It is highly unlikely that the physicists, chemists, architects, veterinarians, pharmacists, epidemiologists, or statisticians who carry out these activities identify their professional practice with the practice of medicine or that they would consider the code of medicine to be closest to their obligations and principles.

On the other hand, physicians decide to act based on the available scientific knowledge and other considerations that form part of the art of clinical practice, but this is not the case for public health professionals. Public health represents an organized effort of the community to improve the health of the population, which requires a large variety of social, economic, environmental, and behavioral interventions. The difference between public health and medicine is that public health is most often delivered by government institutions to a population rather than by 1 person to another.[13] Decisions to intervene in democratic societies are made by governments in the name of the community, not by public health professionals. The Public Health Leadership Society in the United States has noted the need for a public health code of ethics to identify the distinctive elements of public health by making clear to populations and communities the ideals of the public health institutions that serve them.[14,15] For this reason, the society's proposed code of 12 principles for the ethical practice of public health is directed to public health institutions and not to individuals.

With regard to the role of public health professionals as advocates, many,[11,12,16–21] but not all,[22,23] authors consider that public health professionals are responsible for recommending public health interventions and making these interventions known to the public. We agree with the general viewpoint of these authors, which recognizes advocacy as a core skill needed in public health practitioners. Without advocacy, it is highly unlikely that the findings of high-quality research from the different disciplines that make up public health will be translated into action to benefit population health. However, we believe that the failure of these authors to allow for exceptions to their overall position based on the characteristics of each job constitutes an important limiting factor. Other authors have made this allowance, and they remind us that advocacy is especially difficult for public health practitioners who are employed by government agencies.[19,21] For Beaglehold and Bonita,[19] those who practice public health in university settings and, thus, have more independence have a special responsibility to speak publicly on the factors that influence levels of population health and on the most appropriate public health strategies. In their opinion, government employees who wish to act should form advocacy groups outside the bureaucracy. According to Chapman,[21] public health professionals who are government employees can participate in advocacy efforts in their professional capacities.

THE RESPONSIBILITY TO COMMUNICATE PUBLIC HEALTH INFORMATION

Does this mean that public health officials cannot act as advocates? Quite the contrary. In opposition to the previously mentioned authors,[19,21] we believe that public health officials have an important responsibility as advocates within the bureaucracy. It is precisely within their own institutions that public health officials should exercise efforts of persuasion. As public health professionals, public health officials have the obligation to promote and recommend to policymakers the most appropriate course of action in line with the available scientific knowledge and scientific uncertainty and after weighing whether the burdens to society are reasonable when compared with the probable benefits. This is neither easy nor comfortable, because it often means going against the general principles that govern decision-making in the institutions where they work. However, once the decision is made, the responsibility of the public health official as an advocate ends.

We refer here to decisions that are ethically correct. As noted by Chapman,[20] few areas in public health present morally convenient, undisputed "truths," and what is ultimately being debated in public health disputes is the primacy of certain values over others. Public health officials have the obligation to implement decisions even when they do not agree with their values. An altogether different situation, but not the subject of the present work, is their obligation in the face of ethically incorrect decisions. Public health officials have an enormous responsibility to remove from policy debate decisions that are unethical, whether because of insufficient data, clearly discriminatory procedures, unjustified limitations on personal liberties, mismanagement of public resources, or substantial risk to public health. Fortunately, many developed countries have legislation known as "whistle-blower protection," which protects government employees who reveal information in the public interest.

Some authors have expressed the need for public health doctors to be independent of political authorities so that they can disseminate knowledge concerning risk factors for health and intervention measures. For this reason, they have proposed that the conditions of employment of public health doctors be protected.[24–26] However, we do not agree with this opinion. In the first place, biomedical knowledge is irrelevant for the control of many public health problems,

such as traffic accidents or contamination of the drinking water supply. Secondly, these authors forget that public health officials, whether they are doctors or not, serve the democratically elected executive power and provide continuity to institutional functions, and there will always be changes in the persons and political groups who exercise executive power and, consequently, in the decisionmakers. Faced with the same health problem, 1 democratically elected government may choose a way to communicate information or an intervention that is different from what another government would choose 4 years later.

Professional organizations have been of little help in this matter. None of the proposals made for ethical guidelines have considered the work setting of public health professionals.[27,28] These guidelines are meant for professionals who work in the academic world, and the application of some principals to professionals in the public sector is debatable. For example, we do not consider the Public Health Professional Oath proposed by the American Public Health Association [29] to be appropriate for public health officials. The last statement of the oath says, "In all that I do I will put the health of the public first, even when doing so may threaten my own interests and those of my employer." The electoral process is the means by which many societies provide themselves with governments to decide the most appropriate actions to achieve the common good. At the same time, societies provide themselves with a body of civil servants to execute these government actions. Obligations to society as public health officials should prevail over obligations to society as public health professionals, despite the fact that many governmental decisions related to public health may not agree with scientific knowledge or with the values that they defend as professionals. It must be borne in mind that resources are distributed through the political process and, in this regard, the political commitment to public health is not absolute.[30] The obligation of the public health official at all times is to implement the decision, whatever that decision might be.

Let us suppose that the department of health of a country of the European Union is planning to increase the price of tobacco by raising taxes, with 2 objectives in mind: reducing the prevalence of smoking and financing a smoking cessation program. Most of the time these decisions will be made without considering whether the interventions work better in some population groups than in others or whether they work better in groups with the highest prevalence of the health problem.[31] The intervention proposed is a clear example of this issue. In this case, the public health official should exercise his advocacy role within the institution by warning decisionmakers that raising the price of tobacco may reduce the prevalence of smoking more in higher socioeconomic groups than in lower ones—i.e., the ones who smoke the most.[32,33] It should also be pointed out that smoking cessation schemes have been found to be more effective in better-off groups of smokers.[34] Thus, the public health official should advise against this intervention, because the benefits and costs are not equitably distributed: the poor pay for the health benefits of the rich, because the burden of funding is concentrated on those who smoke most and who fail to quit, generally poorer people.[31] However, once the decision to raise the price is made, the public health servant is obliged to implement the program.

We do not understand why many authors believe that public health officials are responsible for communicating public health messages. Similar to the previously mentioned example about raising tobacco prices, policymakers sometimes decide to implement an intervention or recommend a health behavior that public health officials have advised against. Public health officials would not appear in a public forum to defend such an intervention or to recommend a health behavior. Neither should they appear in a public forum to criticize or recommend against the measures adopted. Public health officials should not act publicly as advocates and defenders of public health actions, nor should they publicly disseminate health information. The legitimacy of institutions in democratic societies could be threatened if health authorities and public health officials were to transmit contradictory messages. This also includes factual information, because it is naïve to think there is some neutral, value-free way of presenting information.

Let us consider, for example, a regional health department that decides to carry out a school vaccination program to protect against an infectious disease or to disseminate a message in the mass media about the health risks of drinking more than a certain amount of alcohol. The health authorities will have made these decisions after a delicate process of weighing between the common good and individual rights and liberties and between scientific knowledge and other types of evidence, within the framework of a series of values based on beliefs, ideologies, and legitimate interests. However, the program's effectiveness or the impact of the message on the population may be seriously compromised if, in a newspaper interview or a radio or TV program, a public health official in the department raises doubts about the suitability of the vaccination program or suggests that a different amount of alcohol is a health risk. Because the public servant's mission is to help his organization achieve its objectives, such behavior, other than being disloyal, generates distrust of public institutions on the part of the population, because they perceive a lack of agreement about objectives and inconsistency in the messages that they are receiving.

However, this does not mean that these public health professionals cannot act independent of their status as civil servants. One is a person before one is a public health official. As individual citizens, or as citizens within their scientific societies, these professionals may disseminate information on public health and promote policies to improve the health of the population, based on their scientific knowledge, judgments, and values, although it must be recognized that this is not an easy decision. The acquisition of knowledge, both scientific and nonscientific, is a continuous process, and it is not always possible to separate what one has learned as a public health official and what one has learned as a result of personal interests or as a public health professional in general. Decisions to participate in an advocacy effort may involve the

resolution of personal ethical conflicts between social responsibility as public health officials and social responsibility as public health professionals.

Public health officials are responsible for exercising tasks of persuasion within institutions, but they should not be responsible for persuading audiences. As public health professionals, communication to encourage changes in health behaviors or to influence support for public health programs or policies should be carried out independent of one's position as a civil servant. ■

About the Authors

Enrique Regidor and Cruz Pascual are with the Department of Preventive Medicine and Public Health, Universidad Complutense de Madrid, Spain. Luis de la Fuente and Salvador de Mateo are with the Center National for Epidemiology, Instituto de Salud Carlos III, Madrid. Juan L. Gutiérrez-Fisac is with the Department of Preventive Medicine and Public Health, Universidad Autónoma de Madrid, Madrid. José Sánchez-Payá is with Service of Preventive Medicine, Hospital Universitario de Alicante, Alicante, Spain. Elena Ronda is with the Department of Public Health, Universidad de Alicante, Alicante.

Requests for reprint should sent to Enrique Regidor, Department of Preventive Medicine and Public Health, Faculty of Medicine, Universidad Complutense de Madrid, Ciudad Universitaria s/n, 28040 Madrid, Spain (e-mail: enriqueregidor@hotmail.com).

This analytic essay was accepted December, 19, 2006

Contributors

E. Regidor developed the general idea and wrote a draft. All of the authors provided new ideas and references and contributed to write the first version and the revision of the article.

Acknowledgments

This article presents the conclusion of a seminar on scientific communication held on April 19, 2006, at the University Venue of Cocentaina, University of Alicante, Alicante, Spain, titled "The role of the public health official in communicating public health information."

Human Participation Protection

No protocol approval was required.

References

1. Thacker SB, Berkelman RL. Public health surveillance in the United States. *Epidemiol Rev.* 1988;10:164–190.

2. Thacker SB, Stroup DF. Future directions for comprehensive public health surveillance and health information systems in the United States. *Am J Epidemiol.* 1994;140:383–397.

3. Thacker SB. Historical development. In: Teutsch SM, Elliot Churchill R, eds. *Principles and Practice of Public Health Surveillance.* New York, NY: Oxford University Press; 1994:3–17.

4. Goodman RA, Remington PL, Howard RJ. Communicating information for action. In: Teutsch SM, Elliot Churchill R, eds. *Principles and Practice of Public Health Surveillance.* New York, NY: Oxford University Press; 1994; 150–177.

5. Nelson DE, Brownson RC, Remington PL, Parvanta C, eds. *Communicating Public Health Information Effectively. A Guide for Practitioners.* Washington, DC: American Public Health Association; 2002.

6. Parvanta C, Maibach E, Arkin E, Nelson DE, Woodward J. Public health communication: a planning framework In: Nelson DE, Brownson RC, Remington PL, Parvanta C, eds. *Communicating Public health Information Effectively. A Guide for Practitioners.* Washington, DC: American Public Health Association; 2002;11–31.

7. Brownson RC, Malone BR. Communicating public health information to policy makers. In: Nelson DE, Brownson RC, Remington PL, Parvanta C, eds. *Communicating public Health Information Effectively. A Guide for Practitioners.* Washington, DC: American Public Health Association; 2002:98–114.

8. Susser M, Susser E. Choosing a future for epidemiology: II. From black box to Chinese boxes and eco-epidemiology. *Am J Public Health.* 1996; 86:674–677.

9. Wall S. Epidemiology for prevention. *Int J Epidemiol.* 1995;24:655–654.

10. Savitz DA, Poole C, Miller WC. Reassessing the role of epidemiology in public health. *Am J Public Health.* 1999; 89:1158–1161.

11. Weed DL. Science, ethics guidelines, and advocacy in epidemiology. *Ann Epidemiol.* 1994;4:166–171.

12. Weed DL, McKeown RE. Science, ethics, and professional public health practice. *J Epidemiol Community Health.* 2003;57:4–5.

13. Kass NE. An ethics framework for public health. *Am J Public Health.* 2001; 91:1776–1782.

14. Thomas JC, Sage M, Dillenberg J, James Guillory V. A code of ethics for public health. *Am J Public Health.* 2002; 92:1057–1059.

15. Public Health Leadership Society. Principles of the ethical practice of public health. 2002. Available at: http://www.apha.org/codeofethics/ethicsbrochure.pdf. Accessed October 18, 2006.

16. Wynder EL. Applied epidemiology. *Am J Epidemiol.* 1985;121:781–782.

17. Krieger N, Lashof JC. AIDS, policy analysis, and the electorate: the role of schools of public health. *Am J Public Health.* 1988;78:411–415.

18. Krieger N. Questioning epidemiology: objectivity, advocacy, and socially responsible science. *Am J Public Health.* 1999;89:1151–1153.

19. Beaglehole R, Bonita R. Public health at the crossroads. Cambridge, England: Cambridge University Press; 1997;211–236.

20. Chapman S. Advocacy in public health: roles and challenges. *Int J Epidemiol.* 2001;30:1226–1232.

21. Chapman S. Advocacy for public health: a primer. *J Epidemiol Community Health.* 2004;58:361–365.

22. Rothman KL, Poole C. Science and policy making. *Am J Public Health.* 1985; 75:340–341.

23. Poole C, Rothman KJ. Epidemiologic science and public health policy. *J Clin Epidemiol.* 1990;43:1270.

24. Anonymous. What's new in public health ? *Lancet.* 1991;337: 1381–1382.

25. Sheard S. Gagging public health doctors. *BMJ.* 1994;309:1643–1644.

26. Holland WW, Stewart S. Public health: where should we be in 10 years? *J Epidemiol Community Health.* 1998;52:278–279.

27. Fayerweather WE, Higginson J, Beauchamp TL. Ethics in epidemiology. *J Clin Epidemiol.* 1991;44(suppl I): 1S-169S

28. Last J. Professional standards of conduct for epidemiologists. In: Coughlin SS, Beauchamp TL, eds. *Ethics and Epidemiology.* New York, NY: Oxford University Press; 1996:53–75.

29. American Public Health Association. The public health professional's oath. Available at: http://www.apha.org/codeofethics/oath.pdf. Accessed April 19, 2006.

30. Gostin LO. Public health law in a new century. Part III: public health regulation: a systematic evaluation. *JAMA.* 2000;283:3118–3122.

31. Birch S. Commentary: social inequalities in health, social epidemiology and social value. *Int J Epidemiol.* 2001;30:294–296.

32. Kunst A, Giskes K, Mackenbach J. *Socio-Economic Inequalities in Smoking in the European Union. Applying an Equity Lens to Tobacco Control Policies.* Rotterdam, the Netherlands: Erasmus Medical Center Rotterdam; 2004.

33. Regidor E, Pascual C, Gutiérrez-Fisac JL. Increasing the price of tobacco: economically regressive today and probably ineffective tomorrow. *Eur J Cancer Prev.* In press.

34. Jarvis MJ, Wardle J. Social patterning of individual health behaviours: the case of cigarette smoking. In: Marmot M, Wilkinson RG, eds. *Social Determinants of Health.* Oxford, England: Oxford University Press; 1999:240–255.