

## Commentary

# The Role of Research on the Development and Implementation of Policy

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Virtually all of my work on tobacco control over the last 30 years has been in low- and middle-income countries (LMIC), especially in Asia. I have long argued two things: the first is that advocates and activists MUST keep their feet firmly based in science, and never stray from that science. Not only is this scientific honesty, but the tobacco industry is waiting in the wings to pounce on any policy that goes beyond scientific justification.

Second, I argued for policy-orientated research, particularly in the LMIC, where there are much more severe economic constraints on research funding. In the early days, this was a very new concept to researchers and epidemiologists. Even putting research findings in the public domain was thought somehow almost “unprofessional” and the idea of using research to lobby for government policy was a science—or perhaps an art—in its infancy. Still today, there are few medical schools teaching health advocacy as a part of the curriculum, other than under the broad heading of “communications,” which, however, seems to focus mostly on communication between the doctor and the patient, rather than promoting research findings to influence policy. Even to the present day, I still find I often need to suggest a policy dimension in research being undertaken in the LMIC.

I have asked, bluntly, many epidemiologists what is the point of their work if not policy? The World Congress on Epidemiology in Edinburgh, Scotland in 2011, was a refreshing step forward in that one of the main conference streams was “Policy,” and this provoked much lively discussion. But still, some delegates were heard to complain that the conference “had too much policy.” So the interface and tension between science for its own intrinsic worth, or for its worth in changing policy, continues.

Some scientists, and the late Sir Richard Doll was one of them, feel that it is better for researchers not to be involved with the political implications of their work, and that they can stand more “pure” by simply reporting their findings, and by letting others use these to make political statements and submissions. Part of that argument is that it stands them above the fray when the vested interests of the tobacco industry bring their inevitable criticism. Richard Doll, by the way, slightly modified this stand in later life, when he did campaign for tobacco control measures.

This issue is a rich source of identifying research principles and priorities. It encompasses the many disciplines covered by research into tobacco, ranging from health harm to action, economics to public opinion, obstacles to best practices, and research on political mapping, and throws up questions as well as principles.

## The Tobacco Industry

No discussion of research would be complete without mentioning the need for “research on research” by, for, and on the tobacco industry. It interested me that every article discusses the tobacco industry, some at length. These include its track record on “scientific” research—how the industry secretly hired consultants, sponsored symposia, financed research, and engaged in lobbying in order to generate controversy on the science of tobacco. There is obviously a need for independent research to critique any industry recommendations based on their own research, given the concerns about its limitations to date.

And there is also clearly a need to maintain a high level of research on tactics employed by the industry: youth smoking prevention campaigns, promotion strategies, industry sponsored hospitality groups, smokers’ rights organizations, front groups such as neoliberal think tanks, ineffective ventilation systems, and all its tactics in opposing tobacco control measures, such as attempted interference with policies, especially legislation and tobacco taxation, banned under Article 5.3 of the Framework Convention on Tobacco Control (FCTC).

In recent years, the industry has shifted the focus to economic claims that tobacco control measures will harm the economy—claiming these will reduce government tobacco tax revenues or have dire economic effects on farmers, manufacturers, or street vendors. They claim, for example, that smoke-free environments will be disastrous for the hospitality industry. But a 2003 review on the economic impact of smoking bans, mentioned by Barnoya and Navas-Acien, concluded that

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all the research studies reporting a negative economic impact of smoke-free legislation was funded by the tobacco industry.

Thus, there is a call for both a global clearinghouse for information on industry, and the need, as WHO itself has done, to build a firewall between the industry and public health policy.

### What the Papers Say

Research into tobacco is a moving and changing playing field. Nigel Gray and Ron Borland (research required for the effective implementation of the FCTC, Articles 9 and 10) point out how research has moved from early research on the harmful effects of smoking to research on action and warn us how much more sophisticated research will be needed in the future.

Gary Giovino and coworkers (Research Priorities for FCTC Articles 20, 21, and 22: Surveillance/Evaluation and Information Exchange) argue for standardization in surveillance and monitoring of the epidemic. Globally, standardized studies evolved with the millennium, which began to allow direct comparisons between jurisdictions. For example, previous prevalence surveys used different definitions of an adult smoker as 16, 18, or 25 years and above, or with different upper age limits or death. In 1999, the U.S. Centers for Disease Control and Prevention (CDC) in conjunction with WHO and the Canadian Public Health Association (CPHA) launched the Global Tobacco Surveillance System (GTSS) surveys (Global Tobacco Survey Surveillance System; Warren et al. [2009]), including school-based surveys such as the Global Youth Tobacco Survey (GYTS), the Global School Personnel Survey (GSPS), and the Global Health Professions Student Survey (GHPSS); and household-based surveys include the Global Adult Tobacco Survey (GATS) funded by the Bloomberg Initiative. These standardized questionnaires enabled, for the first time, comparative data analysis on the scope of the epidemic, attitudes toward tobacco, and action taken, on a global scale. The biennial WHO Global Tobacco Control Reports, started in 2008, also use a standardized questionnaire for all member states.

Joaquin Barnoya and Ana Navas-Acien (Protecting the World from Secondhand Tobacco Smoke Exposure. Where Do We Stand and Where Do We Go From Here?) remind us that resources for research to adequately monitor legislation development, implementation, and enforcement are critical to guarantee success of legislation.

Research can dispel some long-held and cherished beliefs. I had always thought a mix of messages and styles the best for package warnings. But David Hammond and Melanie Wakefield (Tobacco packaging and mass media campaigns: Research needs for Articles 11 and 12 of the WHO FCTC) conclude from research on evaluation of warnings that graphic fear-arousing depictions of health effects—the ones you can hardly bear to look at—are the most effective. World Lung Foundation's (WLF) Mass Media Communications Campaigns will only use materials that have been pre-tested with the target audience.

Rebekah Nagler and K. Viswanath (Implementation and Research Priorities for FCTC Articles 13 and 16: Tobacco Advertising, Promotion, and Sponsorship and Sale to and by Minors) identify the obstacles to tobacco control, by examining

past challenges and successes, and how practice needs to inform research, as well as vice versa.

Views currently differ on the most cost-effective way of helping smokers quit, especially pharmaceutical interventions, and particularly in the LMIC. Hayden McRobbie, Martin Raw, and Sophia Chan (Research Priorities for Article 14—Demand reduction measures concerning tobacco dependence and cessation) tabulate the research priorities for the future for establishing the best ways of helping smokers quit.

Corne van Walbeek and colleagues succinctly state (Price and tax measures and illicit trade in the FCTC: what we know and what research is required) “While additional research can certainly help guide future policy efforts, this should not detract from the fact that there is clear and convincing evidence that regular increases in the excise tax are a very effective means to reduce tobacco consumption and improve public health.” While research continues to add to and to strengthen our body of evidence, this statement would also apply to all of the other proven, tested interventions on tobacco control, as recommended by WHO FCTC and mpower.

### Research Priorities

The Global Forum for Health Research sets out the following objectives: to prioritize research, especially in the LMIC; to ensure that the funding and conduct of research are adequate, efficient, effective, and consistent; and to expand the use of evidence, identifying the obstacles to using research results when shaping and implementing policies—such as lack of data and evidence, chronic lack of resources, fragmented health systems, lack of research culture and insufficient communication between researchers and policy makers. (Global Forum for Health Research).

There still remains a serious lack of funds for research and intervention appropriate for the enormity of the epidemic, especially in the LMIC, on which the burden is increasingly impacting.

### WHO and Global Research Priorities

The FCTC itself is an evidence-based treaty. The 2010 WHO document “Health research prioritization at WHO: An overview of methodology and high level analysis of WHO led health research priority setting exercises” had two main goals. Firstly, it provided an overview of methodologies used for research priority setting by WHO. Secondly, it acquired an estimate of the volume of research priority setting per health area by a simple measure of the number of activities in that area. The document showed, in the words of WHO: “A focus on infectious and parasitic diseases, with fewer priority setting activities in the areas of (the combined category of) chronic diseases.” The report noted, “coordination of health research priorities on a global level is an important part of the establishment of a platform for the coordination of health research,” which has not yet been achieved (Viergever, 2010).

### Science Alone Is Not Enough

Analyses on a broad range of health topics have examined the challenges of translating research into policy. Many governments do not instinctively reach for the data when designing

government policy. A “systematic review of systematic reviews” concluded that the strength of evidence was weak for systematic reviews being used by health policy makers and managers in decision making (Perrier et al., 2011).

Fred Carden in “Knowledge to Policy: Making the Most of Development Research,” strikes a pessimistic note. Examining the consequences of 23 research projects funded by Canada’s International Development Research Centre from Asia, Africa, and Latin America show that assumption that research findings will lead to policy change, basing policy on evidence, are overly optimistic, particularly in LMIC without a tradition of analyzing the consequences of research (Carden, 2009).

Few policy makers have the scientific background to evaluate claims and counterclaims or interpret the validity and quality of the evidence. Governments also believe that scientific evidence is but one aspect of designing policy. They consider that they must listen to all opinion, including the tobacco industry and public opinion (which may be grievously uninformed), look at affordability and even diplomatic considerations while accommodating political processes.

Many of us working in tobacco control in LMIC have had such experiences. We are invariably met with the constant request by policy makers of the need for local statistics, so the gap of local research on tobacco in the LMIC is a serious one.

In recent years, funding for tobacco control research, including action and evaluation of that action, in LMICs has increased considerably, through the Bloomberg Philanthropies, the Bill and Melinda Gates Foundation, the International Tobacco Control Policy Evaluation Project (the ITC Project) and several others. The Bloomberg Initiative to Reduce Tobacco Use is funding editorial assistance to authors from LMICs in their articles submitted to the journal *Tobacco Control*. This journal (*Society for Research on Nicotine and Tobacco [SRNT]*) is another dedicated platform for research publications. However, core funding by governments for the WHO FCTC, including FCTC work within their own countries, remains woefully inadequate for the enormity of the epidemic.

The need to bridge the existing gaps between research, policy, and practice appears to be a global phenomenon. Three resolutions—the Mexico Action Statement on Health Research in 2004 (58 countries), the related World Health Assembly resolution in 2005 (193 countries), and the Bamako Call to Action on Research for Health in 2008 (53 countries)—urged researchers, policy makers, and health care providers to collaborate in efforts to bridge these gaps (Lavis et al., 2010).

My own observation is that tobacco control does better than this. Stating and re-stating that 1 in every 2 smokers will die from smoking resonates especially with smoking decision makers. Presenting information as to “what the neighbors are doing” on tobacco control could and should shame tardy governments into action (Eriksen, Mackay, & Ross, 2012). Exposing the behavior of the industry can outrage the health profession, but I am not so sure it has such a strong effect on governments, especially in the LMIC with government tobacco monopolies.

But we need more than personal observation—perhaps a clearing house of the most cogent arguments, based on

research, that have been shown to influence policy (while recognizing it is sometimes difficult to tease out a single reason that has led to the policy). A global clearing house could also collate sophisticated economic research on tax differentials on different forms of tobacco to better understand policies that should be adopted; on research on all the new forms of tobacco flooding the markets, such as e-cigarettes—both immediate and long-term effects; on the most effective models for cessation, similar to the role of the British National Institute for Health and Clinical Excellence (NICE) in treatment recommendations. The need for research on tobacco is still wide open.

## Conclusions

There is a marketing maxim that goes: “If you can’t measure it, you can’t manage it.” If you don’t know what age children start smoking, or how many women smoke, or what makes smokers want to quit, you can’t time and plan appropriate interventions.

Yet, in spite of the hugely increasing volume and quality of research on tobacco on a global scale, tobacco control research is faced with a formidable array of problems. Let us teach, encourage, and fund good research, but let us also teach how to marshal the arguments to lobby a finance minister or a minister of trade. This is so important, it should not be left to chance.

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## Declaration of Interests

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