

Courses in Research-Based Health Activism

Incorporating research-based health activism into the medical school curriculum can help physicians be more efficient advocates for patients.

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This article has 2 premises: research-based health activism can help shape health care delivery and health policy, and teaching such advocacy techniques helps to nurture the health advocates of the future.

Health professionals bring many distinct advantages to the advocacy field. First, they may notice developing problems that have not yet reached public awareness. Second, they usually have better access to data sources than nonprofessionals. Last, health professionals are generally afforded greater authority in the health advocacy arena.

Unfortunately, most health professionals are never exposed to or trained in research-based health advocacy or related areas. Rothman argues that a curriculum that teaches advocacy skills along with diagnostic skills could help rebuild medical professionalism¹. Others have encouraged medical schools to go beyond teaching clinical skills and to become actively involved in socially oriented health policy². Advocacy research could raise the overall standard of health care and also serve as an effective means of responding to public health issues³.

Because of the lack of appropriate advocacy training, some academic institutions are now pioneering courses in research-based health activism. The current article discusses courses that have taught advocacy skills through both lectures and hands-on experiences. It begins with a description of a course taught at the University of Michigan and then describes other courses that have been based, in part, on it.

The University of Michigan Course

In the fall of 1997, 17 undergraduate students took part in a course at the University of Michigan, Ann Arbor. The chief goal of the course was to carry out research projects that could ultimately influence health policy. Over the course of 1 semester, students were responsible for (1) identifying a public health problem amenable to a focused research project, (2) writing a 5-page research protocol, (3) applying to the Institutional Review Board (IRB), if necessary, (4) collecting and analyzing the data, and (5) presenting the project to the class in oral and written form. The class met twice a week for 2 hours and included formal lectures on topics in epidemiology, questionnaire design, and sample size calculation.

Appropriate projects tended to be those that could be conducted quickly and inexpensively, typically secondary data analyses or simple cross-sectional studies. After identifying their topics, students learned about previous research or activist efforts related to their topics through telephone calls to experts as well as Medline and Internet searches. After settling on a topic, each group of 2 to 3 students developed a 5-page research protocol describing the study design, subjects, recruitment methods, study variables, and statistical

approach in detail. After the protocols were submitted at mid-term, students conducted pretests and began collecting data. About once a week, each group reported its progress; other students then offered suggestions on how to overcome any obstacles encountered. This format gave students an interest in each other's work, and they gained familiarity with research and advocacy techniques not directly relevant to their own projects. The course also included mock sessions in which students played the roles of radio, television, and print media interviewers and interviewees.

As the fall semester came to an end, most students wanted to continue their work. At their request, faculty member and member of the Public Citizen's Health Research Group, Peter Lurie, MD, MPH, offered a 2-credit independent study elective during the subsequent semester to 5 of the original 7 groups. Approximately every 2 weeks, the groups met with Dr. Lurie individually to work on the projects. There were also monthly potluck dinners at Dr. Lurie's house at which each group reported its progress, carrying over the interactive and collaborative pedagogic methods from the previous semester. Prior to each meeting, 1 group distributed its most recent write-up so that fellow students could prepare feedback. During these sessions, Dr. Lurie also led discussions on relevant topics that arose (eg, how to write medical journal articles).

Student projects addressed such topics as hepatitis B vaccination availability, sex education information on the Internet, cigarette labels in developing countries, and drug pricing (Table 1). The projects produced 3 peer-reviewed medical journal articles, significant press coverage, submission of comments to an international advisory body, and a press conference attended by a US congressman.

Examples of University of Michigan Student Projects Warnings on US Cigarette Packs in Foreign Countries

This project was a cross-sectional study of international cigarette pack warnings and took place while US policy makers were considering a comprehensive tobacco settlement that did not address international tobacco sales. The students joined GLOBALink, an Internet-based international tobacco activist network. They received data from 45 countries whose GLOBALink member described his or her country's law, or sent cigarette packs by mail, fax, or scanned as email attachments. The labels were then graded on a 0-10 content scale according to whether they included 10 particular health warnings.

In general, US tobacco companies did not go beyond compliance with inadequate local laws. The average content score for developing countries was 1.6, compared to 5.0 for developed countries. Developing country warning labels were somewhat smaller, more likely to be on the sides of the pack, less likely to mention tar or nicotine levels, and less likely to be part of a rotating system of labels.

The results were released as a report⁴ at a press conference in Washington, DC, arranged by Public Citizen's Health Research Group and attended by Rep Lloyd Doggett of Texas, garnering modest television and print media attention^{5,6}. The work was then published in the leading journal in the field, *Tobacco Control*⁷, attracting additional press coverage^{8,9,10}. The group also submitted comments based on its findings to the World Health Organization's Framework Convention on Tobacco Control.

Rates of Hepatitis B Vaccination Among Gay Men in Ann Arbor

Another group was interested in the health of gay men; Dr. Lurie suggested that they investigate hepatitis B vaccination rates. They designed a 25-item questionnaire and submitted their protocol to the IRB. Gay men were contacted through local gay organizations or functions: local bars, dance clubs, a swim team, a gay

fraternity, and gay advocacy groups. Sixty questionnaires were completed by the end of the first semester and an additional 58 were added in the second semester.

Sixty-seven percent of the participants were aware of the hepatitis B vaccine, yet only 22 percent had received the full set of 3 injections. Of those not vaccinated, 58 percent indicated they would be very willing to do so. University Health Services were the sources of information on hepatitis B vaccines for only 14 percent of respondents, compared to 25 percent who named newspapers and magazines as information sources. An article describing these findings was published in the *Journal of American College Health*¹¹, and its release was covered in local newspapers^{12,13}. The group sent a copy of the article to every University Health Service listed by the American College Health Association, urging them to conduct outreach to gay men.

Other Activist Courses

In 1999, Case Western Reserve University School of Medicine established an activist course featuring guest lecturers. This has been the most consistently offered activist course to date. Over time, the focus of the course has shifted increasingly to the design and conduct of research-based advocacy, although the lecture series remains an integral component. Eleven journal articles have been published and 2 are in press on subjects ranging from the content of physician lobbying of Congress to the sudden growth of Internet sites selling ciprofloxacin following the anthrax outbreak^{14,15,16,17,18,19,20,21,22,23,24}.

In early 2001, Public Citizen received a grant from the Medicine as a Profession program of the Open Society Institute to expand the teaching of research-based advocacy. Table 2 describes 17 courses that have been or are being offered. Twelve of these are ongoing, including new courses at Yale, Tulane, and the University of Michigan medical schools. Syllabi for all the courses, including model curricula, are available online at: <http://www.citizen.org/hrg/activistcour/index.cfm>.

Almost half of the courses have required students to write protocols, and 3 have also required students to actually collect data. The course at the Albert Einstein College of Medicine brings in students from around the country for an intensive month-long course; almost all other courses are offered over several weeks or months. Some courses have emphasized media skills and direct action (eg, the 2 courses at the University of Pennsylvania), while others have been more research-oriented (University of North Carolina). Research from the latter course has been presented at a major medical meeting²⁵ and is currently under review at a medical journal.

Public Citizen acts as a consultant to the course directors by assisting in the design of the curriculum, identifying local faculty mentors, offering guest lectures, reviewing protocols during the course, and, where appropriate, assisting in dissemination. It also provides course grants in the range of \$2000 to \$4000 for materials preparation, guest speakers, and subject reimbursement. All projects involving human subjects are required to undergo review by a local IRB.

Discussion

The experiences described here illustrate the potential of research-based health activism as an instrument for both education and activist work. Such a course can benefit students even if they do not ultimately pursue a career in health activism. Being able to use and interpret biostatistics, write research protocols and journal-style papers, and present information to the lay public are useful tools in any health field. An activist course may also create a new career path or unmask an underlying interest in public health or epidemiology.

Health activist courses can be taught at 3 levels: (1) a basic course in which students learn about health activism through lectures and discussions, (2) an intermediate course in which students prepare research protocols but do not necessarily execute them, and (3) an advanced course in which students design and conduct their own research projects. The type of course offered will depend in part on instructor experience, the curricular structure, and the level of student education. A project-based course is clearly more time-consuming and difficult to teach, and therefore may not be feasible in many medical and public health schools. However, even undergraduate students, who are likely to be less experienced and thus may need more supervision, were able to complete some very successful projects. The Case Western medical school experience illustrates that more advanced students can be even more successful.

The instructor's range of experience is an important factor in determining the quality and scope of the course. One area where experience has proved especially crucial is helping students identify topics consistent with interests and practical within a limited time frame. The instructor, or a consultant, must also be able to help students assess the policy relevance of their project, identify other related activist work, and provide appropriate contact persons. Knowledge of research design, statistics, activism, and media relations also is needed. The instructor must be able to improvise lecture topics as the need arises because research-based health activism is often accompanied by unpredictable challenges that need to be addressed rapidly.

Clearly, incorporating new subject areas into already crowded health professions curricula, the structure of which vary from school to school, is a challenge. However, curriculum committees are opening their doors to the ideas and contributions of students in establishing new courses. In 1995, Dartmouth Medical School invited its students to organize electives addressing topics that were not being offered by the school. One group of students successfully developed a women's health elective. An article describing their efforts stated that their "experience shows that medical students' personal involvement and their unique viewpoint can be invaluable additions to any medical education reform effort"²⁶. Nine of the courses described here were initiated or run by medical students or residents, reinforcing the Dartmouth experience.

Developing a research-based health activism course is challenging and time-consuming. Our experience suggests, however, that it is both possible and worthwhile. It is our hope that this article provides a framework for the development of additional courses.

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Tables

[Table 1: Student projects at the University of Michigan, 1997-98.](#) [Table 2: Activist courses in the US, 1998-present.](#)

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