

# Preventing Data Drain: An International Project

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## Summary

This report describes a project to train scientists in developing countries to plan and create high-quality scientific reports in the hope that these reports can be published in the Western peer-reviewed literature. Trainees included program managers in African and South American countries that collaborate with US scientists through the CARE-CDC Initiative. Discussions with the editorial staff of the *American Journal of Public Health (AJPH)* led to an agreement that they would consider publishing an issue of the journal dedicated to global health if the trainees could provide reports of sufficient quality and interest to pass the peer-review process. After a 1-week workshop in Atlanta, 24 reports were submitted to the *AJPH*; all were approved for publication. The global-health issue of the *AJPH* was published in October 2001.

## Barriers to Publication in the Western Peer-Reviewed Literature

Several of us on the staff of the Centers for Disease Control and Prevention (CDC) in Atlanta read a 1995 article in *Scientific American* that addressed the issue of “lost science in the Third World”.<sup>1</sup> The author examined the peer-review process and the (actual and perceived) barriers that confront scientists in developing countries when they try to publish in the Western peer-reviewed literature.

At CDC, our conversation took a slightly different direction from the general drift of the *Scientific American* article. We talked about all the instances we knew about in which the process that I call “data drain” had occurred. This process is as follows:

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A scientist (or institution) from a developed country collaborates with a scientist (or institution) in a developing country to address a health-related problem. As results are obtained from the collaboration, the scientist from the developed country writes them up and publishes them in the peer-reviewed literature. The scientist from the developing country either is listed as a coauthor, is mentioned in the acknowledgments section, or is not listed at all.

The failure to mention the scientist from the developing country is difficult to excuse. It is hard to believe that I could forget the contribution provided over a several-month or several-year project by my host-country colleague. In instances in which the host-country colleague designed and conducted the study (with input from me), it is difficult for me to accept the practice of placing that person’s name only in an acknowledgments section or in the list of coauthors. Such actions might occur because the colleague lacked the English proficiency to write the article unaided or because he or she did not know the procedure for submitting an article for publication in the Western peer-reviewed literature and would not be able to deal with journal editorial staff in shepherding the submitted article through to publication. They might also occur because of the perception that known authors are more likely than unknown authors to have their material accepted for publication by peer-reviewed journals; actions based on this premise create a closed circle into which new authors from developing—and developed—countries would have difficulty entering.

The problem does not appear to me to be one that will go away without intervention. The developed world has benefited from results of studies of problems that continue to occur in the developing world. In fact, the developing world continues to serve as the public-health laboratory for

the rest of the world. Although responsible scientists would not dream of deliberately designing experiments that would subject persons in war-torn, economically challenged, or socially unstable countries to additional stresses by introducing infectious or toxic processes into their midst, the developed world has been content to benefit from the results of studies of just such problems in just such settings. I do not argue with that position. It is a major and legitimate means by which biomedical science has progressed throughout history. However, I find it unacceptable that some scientists in the developed world are willing to continue to take credit for the scientific work that is being done, in great quantity and with high quality, by scientists in developing and stressed countries, resting on the rationale that the latter group cannot provide the material in satisfactory language and format and do not know how to make their way through the clearance and review process that precedes publication in the Western peer-reviewed literature.<sup>1</sup>

## Opening the Closed Door to Publication

Over the last several years, the CARE-CDC Initiative (a collaboration between CDC and the international humanitarian organization CARE) has addressed health-related problems in several African and South American countries. The foci have included maternal and child health issues, safe water supplies, and—more recently—HIV/AIDS-related issues. As a component of the collaboration, a number of articles have been published to document success of the various programs and intervention strategies. All have been written by CDC-CARE staff and coauthors from the countries in which the programs are taking place.

We decided to design a strategy to help scientists in the participating countries

develop the skills and understanding needed to allow them to prepare the reports for publication, with assistance from their CARE-CDC colleagues, and to earn the right to have their names listed as first authors of the resulting publications.

## The Project: Training and a Journal Issue

The first step was to propose to Mary Northridge, editor of the *AJPH*, that we provide a number of reports for a journal issue dedicated to global health. (Conveniently, the American Public Health Association had chosen global health as its topic of focus for 2001.) We agreed to meet her requirements for quality and timeliness to create a dedicated issue of the journal in autumn 2001. It was agreed that the issue had to be published in time for presentation at the yearly meeting of the association, which occurs in late October or early November. We would provide copies of the articles we had received from the African and South American authors to Dr Northridge and her staff near the beginning of 2001 for a cursory review and approval in principle. We would then conduct a workshop in Atlanta to assist those authors and their CDC-CARE counterparts in revising their reports to a level likely to pass the *AJPH* peer-review process. When the revising and polishing process was completed, we would submit the manuscripts to the journal to be sent for peer review and await the decision of the journal editorial staff.

An ancient proverb says that giving a man a fish feeds him for one day, but teaching him how to fish feeds him for life. We recognized that the process described above constituted giving our African and South American colleagues a fish, that is, that they would not necessarily return to their homes after such a workshop knowing how to plan and write the next article for publication. In an effort to teach them how to fish, we added what I consider to be the most important part of the intervention strategy: We spent half our time with the workshop participants teaching them the principles of good scientific writing and negotiation skills for navigating the

prepublication production process. We did it through didactic sessions, small-group discussions, problem-solving sessions, writing and critical-analysis sessions, and question-and-answer sessions with *AJPH*'s editorial staff.

Twenty-four program managers employed by CARE in the partner countries in Africa and South America and their counterparts from CARE-CDC participated in the workshop, which lasted 7 days. To staff the workshop, I recruited five writer-editors from various programs in CDC and a seasoned editor who agreed to travel from Canada to participate in the program. I divided the reports to be reviewed and polished into seven groups, and I assigned an editor (including me) to each group of papers.

We applied for funding through a grant process managed by CDC's Office of Global Health. Total funding was about \$60,000, which covered travel, lodging, and incidental expenses for the trainees; the rental of a small conference center near the CDC headquarters campus in Atlanta; rental of equipment needed in the workshop; and handouts and supplies for the workshop. CDC donated the services of the mentoring editors except the Canadian colleague, who was reimbursed only for travel and lodging expenses associated with the Atlanta workshop.

The workshop was scheduled for the first week of May 2001, but the mentoring editors received the papers from their in-country first authors for review in early March. We read the papers and commented on matters of concern. Messages were forwarded back and forth among in-country authors, their assigned mentoring editors, and coauthors at CDC and CARE. By the time the trainees arrived in Atlanta to participate in the workshop, they had been in contact with their mentoring editors several times and had begun to accept

## Preventing Data Drain *continued*



Point-of-Use Water Treatment and Safe Storage in Madagascar and Kenya  
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IN SOUTHERN SUDAN | Maternal and Child Health Surveillance in Tanzania | Youth  
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the idea that theirs was to be a supportive, positive relationship.

Mornings of the workshop were spent in didactic presentations and in other types of activities described above in an effort to improve the general ability of the trainees to design and write a scientific report. Afternoons were devoted to the *AJPH* component of the project; participants were divided into small groups, and a cluster of authors gathered with their assigned mentoring editor to work on problems related to the manuscripts that were to be submitted to *AJPH* for publication. Afternoons often stretched into evenings, and many telephone conferences and individually arranged meetings between editors and authors occurred throughout the week. The *AJPH* editors participated in the first 3 days of the workshop and answered questions or addressed issues related to publication management and the peer-review process with authors and mentoring editors alike.

Comments during and at the end of the workshop indicated that the trainees, mentoring editors, and journal editors all

*Preventing Data Drain continued*

enjoyed the experience, thought it was beneficial, and wanted to repeat it.

One test of success was whether the articles written for publication in *AJPH* and reviewed and polished in activities related to the Atlanta workshop could pass muster in the peer-review process. To meet the journal's production requirements, we needed to submit all manuscripts to the journal for final review and approval by the end of the first week of June (a month after the workshop ended). That presented a substantial challenge. Several manuscripts were left in Atlanta for final polishing; it was agreed that the first authors would contact the mentoring editors by e-mail or telephone and provide instructions about final corrections and other amendments. However, at least 10 manuscripts had to return with their first authors to their own countries, and we were concerned that the uncertain electronic and postal connections with some of those countries might forestall meeting the time constraints required for inclusion in the special issue of *AJPH*. Our concern proved unnecessary. All 24 manuscripts we had worked on in

the workshop were in Atlanta on time and had been forwarded to *AJPH* editorial staff by the end of the first week of June. Even more important, they all passed successfully through the peer-review process and were published in the October 2001 issue of *AJPH* (see Figure).<sup>2</sup>

### Looking Ahead

The experiment in applying a strategy to avoid data drain in a single, intensely focused instance appears to have been a success. Whether the trainees improved their ability to design and conduct a study, plan a report, write it up, and submit it (successfully) to a peer-reviewed journal without the assistance provided in this model remains to be seen. Through the CARE-CDC Initiative, we hope to monitor this aspect of the learning model over the next 2 years and to get some sense of what skills and understanding of the review and publishing process were conveyed and absorbed—in other words, what capacity was built to allow achievement in the future.

In the same time frame, we would like to

expand the base of operations for the training module to include other journals that have a focus on global-health concerns and to work with authors in additional developing countries who are having difficulty in getting their science published in the Western literature.

Time will tell.

### Acknowledgments

I would like to thank Bruce Squires, retired editor-in-chief of the *Canadian Medical Association Journal*, and the following CDC staff for their dedication and expertise as mentoring editors for this project: Suzanne Hewitt, Gwen Ingraham, Ava Navin, John O'Connor, and Caran Wilbanks. 

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2. (Issue dedicated to global health.) *Am J Public Health* 2001;91(10).

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