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A Model for Involving Local Communities in Global Health Interventions

Review by Margaret A. Graham

Community Participatory Involvement: A Sustainable Model for Global Public Health

by Linda M Whiteford & Cecilia Vindrola-Padros

Left Coast Press, 2015

Anthropologists who collaborate with communities and organizations to bring about positive social change and improve public health will be very interested in this concise, but detailed, case study of an international effort to control a cholera epidemic in the Ecuadorian highlands in 1994-1995. So will faculty, researchers, NGOs and others engaged in global efforts to enhance health and well-being. Cholera, an acute bacterial infection of the intestine, is spread through contaminated food or water, or contact with contaminated feces, thus it disproportionately affects the poor and the marginalized who lack access to clean water and sanitation systems. After disappearing from Latin America for almost 100 years, cholera reappeared in Peru in January 1991 and spread rapidly. It reached Ecuador a few weeks later on 20 February 1991 when a Peruvian fisherman from Tumbes traveled across the border to the south coastal region of Ecuador to collect shrimp larvae (p. 79-80) and spread quickly. The epidemic was controlled relatively quickly in the urban areas with classic public health educational campaigns that encouraged handwashing, the avoidance of street foods and raw and undercooked fish, and sanitary feces removal. The campaigns were not as successful in the highland communities where cholera continued to be transmitted. The Community Participatory Involvement (hereafter CPI) model—the subject of this book – was employed to address the transmission of cholera in four communities in the Ecuadorian Andes.

The first four chapters of the book provide the conceptual background of the model (chapters 1-3), and background on the epidemiology of cholera in South America (chapter 4). Chapter 1 introduces the key

theoretical and methodological bases of the CPI model, especially its emphasis on leadership development and capacity building at the community level, and describes how the model can be employed to address a wide range of global health issues. Chapter 2 locates the CPI model within the scholarship of behavior change and compares CPI to other health intervention models (e.g., the Health Belief Model, Theory of Planned Behavior model, and the Transtheoretical model), most of which focus on the role of the individual and motivation to predict behavior change. In contrast, the medical ecology theory that underlies the CPI model employs a broader view that highlights the complexity of a person's social contexts as well as the multiple, interconnected factors (biological, physical, and political economic) that influence a person's health. The authors also discuss in chapter 2 how the CPI model differs from other Community-based Participatory (CBP) models in that "its focus lies in the relationships community members are able to establish with different sectors of the state and civil society. In this model, even though the engagement of community members is seen as intrinsic in the generation of changes, these changes are seen as requiring input and support from a wide range of stakeholders. Local community needs are seen as the responsibility of community members, different levels of political and civil authority, and non-governmental organizations" (p. 43). Local engagement with these other levels requires the active involvement of multiple stakeholders and builds leadership and capacity building at the local level. Chapter 3 describes the CPI model—its theoretical model, key concepts, and methodology – in depth. The authors trace the evolution of the CPI model, developed and funded by USAID, from earlier versions (Community Involvement in the Management of Environmental Pollution (CIMEP) and the Community Participatory Intervention (CPI) models) that recognized that any sustained change "must include the community into its design and implementation" (p. 53). The five key elements of the CPI model include (p. 53):

The role of effective community engagement

The elicitation and validation of local beliefs

The generation of base-line and follow-up epidemiological data

A scale up with local, region, and national authorities

Sustained capacity building

In chapter 5 the authors provide a case study of the CPI Cholera Project in Ecuador and descriptions of the four selected rural communities. The goals of the project were to identify the beliefs and behaviors related to the spread of cholera, namely water treatment, especially water storage and re-use practices, hand washing, and food treatment, and to make recommendations for community-based involvement to

change those beliefs and behaviors in culturally appropriate ways. The long-term goals were to facilitate the development of leadership at the local levels that could help sustain the changes. Whiteford and Vindrola-Padros discuss in detail the steps involved in the project planning and development stage, and then proceed to describe the activities used in the implementation of the field project. The project was carried out by three interlocking CPI teams: the Technical Team (TT) composed of national and international advisors from Ecuadorian Ministry of Health and USAID; the Regional Teams (RT) of Ecuadorians from regional or municipal government departments and NGOs; and Community Teams (CT) made up of members of the four affected communities. The project was careful to expand the leadership roles in the CTs and to include those—women, younger adults—who would normally not be considered for leadership roles in these communities based on their gender and/or age. At the community level, several innovative methods were used to collect and disseminate information during the twelve-month project. These methods and tools—community assemblies, ethnographic interviews and visual monitoring of water-handling practices including water storage and re-use, perception mapping, and workshops—were all critical to the success of the project. Based on the findings and workshop discussions, each community designed a specific cholera control project that the community itself would implement, sustain, and monitor. The community members were not just respondents but were themselves trained in ethnographic techniques that included structured interviews, observational techniques, and surveys. The technical team also provided funds for household water containers (*bidones*), inexpensive water disinfectants, public garbage containers, and local health fairs to support the community projects. The appendices include copies of the workshop materials and tools.

Chapter 6 discusses with rich ethnographic detail the outcomes of the intervention and its evaluation by the community and technical teams. Comparing baseline with the follow-up survey shows that people changed the way they understood disease transmission and changed their behaviors. Three of the four communities showed marked changes in beliefs and behaviors that were targeted for change and in the spread of cholera. For example, people had a better understanding of how diseases like cholera are transmitted in contaminated water and the percentage of households that washed dishes with clean water and soap increased by 42%. One of the most successful interventions was the provision of new, five-gallon water containers that have spigots and tight-fitting lids that kept water clean, which were lovingly covered with special clothes to keep the exterior of the container clean. Most of the communities also experienced an increased closeness and improved sense of community. The most isolated community did not show the same degree of improvement, but did respond in a less expected

but nonetheless very interesting way by coming together and identifying the need for a community childcare center where mothers can take turns caring for young children while the other women worked 10-hour days in the fields. To meet the high demand, the mothers got together and requested another water container and disinfectant so children would have access to clean water. The authors state, “The development of the Pompeya community childcare center exemplified the very skills that we hoped to see emerge from the project: initiative and partnership combined with local leadership to treat a locally identified need” (p. 126). It also underscores a central premise of the CPI model: that small rural communities are not carbon copies and that local needs and voices must be considered when attempting interventions of any kind.

Chapter 7 is organized around take-away messages and lessons learned. There are many important lessons learned but the focus on expanding local leadership and capacity building is one of the most critical and exciting aspects of the CPI model. Too often the community voices heard in participatory research are those already in the power structure, those who hold the traditional authority for making decisions on the part of the whole. This model explicitly rejects that model of leadership and includes the voices and perspectives of people who are often excluded from decision-making and leadership roles. As this case study shows, opening up leadership and building individual skills is key to developing true community and regional leaders who are an integral part of and truly committed to creating sustainable social change.

Applied medical anthropologists and those working in non-governmental and governmental organizations concerned with global health issues will be very interested in this case study. The book would make an excellent addition to upper-division or graduate classes in medical anthropology, global health, and community-based participatory research methods. Each chapter concludes with a brief summary and in-class exercises related to the concepts and themes addressed in the preceding chapter. The appendices include workshop materials, research instruments, list of resources and health related databases, and a link to a ten-minute video from the research site. I recommend complementing the book with Wellin’s classic study of water use in a Peruvian town published in 1955 for a critical discussion of public health interventions, historical racism, structural violence, persistent economic and health inequalities, and why poor, marginalized Andean communities still lack access to clean water and sanitation systems 60 years later.

References Cited

Wellin, E. (1955). Water boiling in a Peruvian town. In Paul, B. D. (Ed.), *Health, culture and community* (pp. 71-106). New York, NY: Russell Sage.

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