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FIELD NOTES

Melding Data Collection Methodology with Community Assistance: Benefits to Both Researchers and the Indigenous Groups They Study

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ABSTRACT

I present a description of a model of melding data collection with community aid in the form of health educator training that emerged in the process of research collaboration during 2009-2011 with the Kawymeno Waorani foragers of Amazonian Ecuador. Some guidelines are suggested as to how benefits to both parties might be achieved when collecting data with indigenous populations. In this article I describe some of the advantages and pitfalls of melding data collection and community aid when collaborating with vulnerable indigenous groups.

INTRODUCTION

For anthropologists in the field doing research with indigenous groups, the question is no longer, “Can we preserve the culture or protect them from modernization by non-interference?” but rather, “How can we help indigenous groups adapt on their own terms to the severe changes that are occurring due to globalization, both for the individual humans we work with and for their overall cultural integrity?” Scientific detachment at the expense of human suffering has damaged researcher relationships with indigenous groups to the extent that many groups resent the intrusion of researchers who often come wanting information but offer little in return of value to them.

Our study compared and evaluated the relationships between food systems and health across two Ecuadorian Amazon indigenous groups, the last confirmed close-to-full-foraging Kawymeno Waorani sub-group in Ecuador, and the other a neighboring remote Kichwa indigenous community practicing subsistence agriculture. My wife and I lived and worked during 2009-2011 in these two relatively isolated Amazonian communities. We camped in the rain forest many days travel in canoe from the nearest town or airstrip. We collected data on dietary and health differences between these foraging and subsistence farming groups.

Yost spent years studying the Waorani. His accounts give an idea of their isolated lifestyle (Yost 1981,
1983), food and medicinal system (Davis and Yost 1983), and health in a series of articles with co-authors Larrick and Kaplan (Kaplan et al. 1979, 1980; Larrick et al. 1979) in the early years of contact with outsiders. More recent articles discuss changes that have taken place in Waorani groups in recent years (Rival 1993, 2002) including economic patterns (Lu 2001; 2006) subsistence patterns (Lu et al. 2010; Mena et al. 2000) and efforts at conservation involving the Waorani (Lu et al. 2010; Winterhalder and Lu 1997). The Kawymeno Waorani subgroup we carried out research with is a predominantly foraging–based community and rarely mentioned in recent academic literature, although Kron visited in 2000 (Kron 2000). Kawymeno is in the middle of the protected Yasuni National Park and not on the fringes as are other Waorani groups, making visits difficult. In fact, we found most Waorani in the more acculturated Waorani communities, on which most recent Waorani scholarly literature is based, have never visited Kawymeno. We were the first foreigners they had allowed to live in their hunter-gathering community. We had no means of communicating with anyone outside the community, where we stayed for months at a time, and depended on the Waorani for food as only a limited supply could be brought in with us via canoe.

Other Waorani subgroups (e.g., Tagaeri, Taromenane) may still exist largely out of contact with global society. However, changes are now occurring rapidly in post-study Kawymeno because they are the closest Waorani group (25 minutes in canoe) to the remote untapped oil reserves of Ishpingo-Tamboococha-Tiputini. Shortly after our study completion, regular oil company intrusion is now ending an era when Kawymeno was so removed from the global food system that they ate only wild fruit and meat and did not use salt, sugar, cooking oils, grains and other agriculturally-based food. The Ecuadorian government has recently announced drilling will commence in Yasuni National Park.

We wanted to build a collaborative relationship and to give back something of value immediately to the people who so generously allowed us to stay with them. I had worked in the public health field aiding indigenous groups for 15 years prior to becoming an anthropologist. International aid projects I worked on typically have built-in, preconceived objectives resulting in inflexible projects that the community has to accept or reject as whole and cannot greatly modify. Anthropologists, unlike aid workers, can have extended community relationships beyond a grant or project cycle and can modify an aid project in collaboration with the indigenous community.

We wanted to collaborate and give something of value to the Kawymeno, but with limited funding we also needed to have an efficient, rapid, and culturally appropriate method of data collection. The end result was a data collection method that melded community assistance with more rapid data collection. The assistance was in the form of health promoter training while the combined methodology used for both training and data collection was a mutual interchange of information through daily classes, where both researchers and the Kawymeno shared expertise about their respective food and health systems. The final design was an inter-personal collaborative process that occurred in the field as we reached an agreement with the Kawymeno. We found that starting a community-researcher relationship based on trust and mutual exploration of each other’s culture as a part of our research methodology can be an enjoyable and efficient use of time for both parties.

CONSIDERATION OF ALTERNATIVE COLLABORATIVE DATA COLLECTION METHODS

There are advantages to giving back to the community during rather than after the study, both from a data collection as well as a community benefit perspective. For example, that means prioritizing more community input, constant on-site interaction between researchers and the community, and build-up of more rapid mutual trust by focusing on present joint actions rather than future promises.
The latter was exemplified by our being the only non-Ecuadorians invited to Waorani nation talks on oil company drilling near Kawymeno.

In the past, anthropological researchers were rarely formally trained on culturally appropriate ways to assist indigenous communities, but that is changing; they do have skills that they can offer to benefit the community. However, researchers, including medical anthropologists, often use less participatory methods of data collection, and when working with indigenous groups in remote regions, decide to save the “giving back” part of the study until after the study is over. The “giving” consists of presenting their study results to the community. We decided presenting post-study results to the Waorani community would be insufficient because (1) there was less opportunity for us to offer something of applied benefit to the communities; (2) we believed giving the community a final set of “answers” rather than an ongoing interchange might discourage the Kawymeno from engaging the strengths of their own culture to solve their own problems; (3) the information or advice we give them might be wrong. After all, results from different studies often contradict each other. We decided giving no advice can be better than giving the wrong advice, even advice couched in a detached, less opinionated academic form. The underlying issue is that a report to the community, usually at the end of project, is a rather distant, intellectual, but ultimately opinionated product based on one study that is often more valuable to the researcher than the indigenous group.

In looking at offering community aid that has overt political goals or brings in outsiders, such as legal advice, we recognized that it may have unforeseen consequences for all parties and be less suitable. We considered working on an ecotourism project to provide independence from the expected oil company domination when drilling near Kawymeno eventually commences. Ultimately, we decided such an ambitious project would over-extend ourselves, as well as bring the Waorani complications resulting from outside economic interests.

As for donating material goods, we believed doing so could promote dependency of the Kawymeno Waorani on outsiders and reduce their confidence in their own culture’s ability to resolve problems. Donating could exacerbate the power differential between individual Kawymeno, and jeopardize our relationships. Conscious of these potential problems, we decided to bring in a limited amount of medical supplies and equipment for promoter training. Chambers notes that, in fact, collaborative community assessment can lead to more culturally appropriate outside aid if donors heed the recommendations that come from an assessment of community needs conducted jointly by the researchers and the indigenous people in question (Chambers 1994). During visits to Kawymeno in 2008 and 2009, we carried out a collaborative community assessment of health needs and then used the following criteria to evaluate what we might exchange with them: (1) something the Kawymeno both valued and wished the Waorani needed; (2) something that might sustain successful future interactions between the Kawymeno and outsiders; (3) something in which benefits greatly outweighed any possible problems; (4) something that my wife and I were capable of giving; and finally, (5) something that would benefit the whole Waorani community, not just select individuals in the community.

The model agreed upon had similarities to community health promoter training used by many international development organizations. However, unlike an international development project, the goal was mutual exchange rather than just fulfilling a set curriculum and in addition the initiative came from the indigenous group. The health promoter training model was ultimately motivated by and unanimously agreed upon by the entire Kawymeno community in 2010 after a series of meetings. The benefit of our model from a research perspective was that it permitted extended daily data collection sessions not possible with a Kawymeno group that was suspicious of outsiders and unaccustomed to answering a series of questions. In turn, the model
met Kawymeno interest in preparing leaders to deal with the increasing outside contact they were starting to experience and vocalized their need for protection against local venomous snakebites and diseases coming from increasing contact with outsiders, such as tuberculosis, falciparum malaria, and hepatitis.

The health promoter training provided Kawymeno with future community leaders who would be more aware of the biomedical system that they soon would interact with regularly. By successfully working with foreigners through personal interaction in the training, we hoped Kawymeno competence and confidence in communicating successfully with outsiders, including government, oil companies, religious groups and non-profit organizations, would be increased. We hoped the training would build foundations for the Kawymeno Waorani to initiate their own community health promoter program and better understand the culture of modern health care.

HEALTH PROMOTER TRAINING AS DATA COLLECTION METHODOLOGY

Health promoter training was a two-way street. It gave us the opportunity to talk about health and diet with the Waorani hunter-gatherers on a daily basis for months, which helped us collect and later target some of our data collection. In this exchange, we had informal daily conversations, not unlike focus groups, and gathered data about study topics such as health and diet, much faster and in much greater quantity than we had anticipated. We developed mutual respect, friendships and initial community acceptance. One of my Waorani assistants eventually named his son after me, and we have remained in contact.

Asking or answering questions is inappropriate in normal conversation with the Waorani. However, in a classroom context where both teachers and students were allowed to ask questions, the clear objective was to learn. Thus, detailed questions about health and research topics could be broached and we could satisfy Waorani curiosity about our lives. It was clear that we were trying to learn and teach each other and there was no hurry to get answers since both the teacher and the students were “participants.” Classes took place outside in the rain forest ecosystem. While much of the time was spent training my Waorani students to be health promoters, they in turn enjoyed teaching me about what they knew best—hunting and gathering in the Amazonian rain forest—exactly what I had come to study. I had a built-in daily Waorani focus group with whom I could discuss their dietary intake while surrounded by the food system I was studying.

We could answer Waorani questions about our research daily to avoid misunderstandings. The Waorani knew what we were doing in our study and why we were interested in certain research questions. We were able to describe our research and create an environment in which they felt comfortable asking questions about our research. Quality and quantity of data collection exceeded other less mutualistic philosophies than we had employed previously. By using a classroom and course structure with a joint goal, we were given much more time to interact, over ninety focus group sessions over a period of months, often totaling several hours a day, with no sign of loss of attention or interest on the part of the Kawymeno.

Not only did our health promoter classes provide daily data on planned research topics, but these daily conversations also led to fascinating new research topics. I was still spending much of my time photographing and cataloguing all the wild foods the Waorani ate in the rainforest. However, one day in the health promoter class, while we were discussing the value of foods, my wife suggested that my Waorani students bring in many different types of wild fruit from the rain forest so we could talk about food. I asked them to describe the smell and taste of these foods. We soon discovered that the Waorani have dozens of words to describe the subtleties of certain food flavor characteristics, whereas the English language typically had only one word. This class exercise stimulated a major research effort into understanding the mutualistic as well as conflictive relationship between humans and wild
plants, particularly how plant-produced smells and flavors drive human behavior.

**HOW WE DESIGNED A FORAGER HEALTH PROMOTER TRAINING PROGRAM**

Potential early pitfalls included making sure that we got Waorani volunteers with more than a passing interest in the training and avoided inadvertently taking sides by selecting students from one particular family group. We dealt with this by turning over the selection process to the community. Interestingly, the community members they selected for the health promoter trainees were not ones we would have chosen ourselves. In fact, we were not aware these candidates were even interested as they were not the people who first approached us. However, all but one trainee participated in the entire training.

We trained four Waorani community members for six months: one woman and three men, who varied in age from 24 to 40 years. The community selected all four, and we met most mornings for many months unless hunting, gathering, and other survival needs took precedence.

We wanted to encourage the Waorani hunter-gatherers to continue their present diet and to provide complementary health skills, not competing ones. Our first activity was to find out what health problems the Waorani did and did not have. We devoted time early on to understanding their health practices before starting to design the health training curriculum. The Kawymeno group is a unique, close-to-full foraging group that did not have dozens of the chronic and infectious diseases other Waorani groups do, such as worm parasites and bacterial infections (London and Beezhold 2014; London and Hruschka 2014). An early project was a nursery garden of wild Waorani food plants to help emphasize the value of their present diet. We hoped this would provide a learning tool to help younger Waorani appreciate and make an informed decision about the advantages as well as challenges of maintaining a traditional wild hunter-gatherer diet as “modern” food and agriculture is introduced. We made an effort to explain the advantages and disadvantages of the global food system.

We determined that lecturing was inappropriate in this context, so we used experiential learning such as role-playing games where Waorani trainees pretended to be sick and were mock-treated by others. We practiced administering snake anti-venom, making oral rehydration fluid, suturing wounds, identifying disease symptoms through examination, and treating malaria with antimalarial drugs. Since the Kawymeno had not experienced malaria until recently, they lacked natural remedies. We also visited sick people in the community. In addition, my wife worked with children, teaching activities such as tooth brushing and hand washing through songs and games.

There were many impromptu training occasions such as when one of my health promoters was bitten by a very poisonous Fer-de-Lance snake (*Bothrops atrox*), which were extremely common in this region, so we demonstrated on the spot emergency anti-venom injections to control the reaction to the poison. (Even with the use of traditional snakebite remedies 4.9% of all Waorani deaths were attributed to venomous snake bite [Larrick et al. 1979]). In another instance, when a Waorani warrior split open his forehead, we learned about stitching up wounds. We had already practiced stitching up animal skins.

Continued opportunity to acquire health-promoting skills was essential so we also arranged for ongoing training sessions from a regional indigenous health promoter training non-profit organization called Sandi Yura, which provides ongoing training and medical supplies to its promoters.

**COMPARISON WITH OTHER FORMS OF COLLABORATION AND COMMUNITY AID**

Altman states that collaborative study methods foster better long-term relationships between the community and researchers as well as providing more useful
interventions for the community after the researcher leaves (Altman 1995). Other researchers emphasize that collaborative approaches to health research and health promotion improve community sense of empowerment (Wallerstien 1992; Israel et al. 1994). Further, collaborative health training, a mode used by our study to benefit the Kawymeno community, is in general a useful methodology to improve a sense of community empowerment (Israel et al. 1994).

The American Anthropological Association organized a committee in 2002 called the “El Dorado Task Force” and their report concluded anthropological work with indigenous people should move towards more collaborative models (American Anthropological Association 2002). However, anthropologists have long debated the most appropriate type of collaboration with indigenous partners including the political activist and community involvement roles of the more recent anthropological era (Farmer 2001; Schepet-Hughes 1995). Some anthropologists have described collaborative ethnography as not simply another tool but as a fundamental reformation of the ethnographic process (Fluehr-Lobban 2008; Holmes and Marcus 2008; Lassiter 2001, 2005; Lassiter et al. 2005; Rappaport 2008). Susser first suggests that anthropologists working with people with preventable diseases need to become more involved in clinical interventions (Susser 2010), while others point out that activism on the part of the anthropologist can sometimes pose a danger to both the anthropologist and indigenous study partners (Schuller 2010); both of these perspectives were a consideration in our study methodology.

Cross-disciplinary effort to combine public health and anthropological methodologies is on the agenda of medical anthropologists (Hahn and Inhorn 2009). There are sources of practical hands-on interdisciplinary literature on conducting community-based collaborative health research, useful for both medical anthropologists and public health researchers (Israel et al. 1998; Minkler and Wallerstein 2010). Culturally appropriate community assistance has been translated into a form accessible to indigenous communities in a classic series of books by the Hesperian Society translated into over 80 languages and used in 221 countries (Werner 1992; Werner and Bower 1982). Like Werner, our methods passed on health information through training health promoters. However, our approach was grounded in an exchange of equals in contrast to Werner’s approach of culturally appropriate health education. We, as researchers, were getting something back and the process was not as selfless as the Werner philosophy.

Our model of melding data collection with community aid differs from most participatory research, which has a more overt political design intended to make positive community change such as protecting human rights (Fals-Borda 1987; Wallenstein and Duran 2006), natural resources (Donoghue et al. 2010) and health (Green et al. 1995; Green and Merc 2001; Israel et al. 1998, 2001). Our goals were more immediate and modest, as we were not directly advocating for Waorani indigenous rights. However, we hoped investing in the Kawymeno Waorani trainees’ individual intercultural competencies would provide more information about non-Waorani behavior and in the process provide the tools to confront the human rights struggles they will face. The mutual exchange that occurred during training was an intended benefit in itself, not merely an intermediate step to give culturally appropriate aid.

In the end, what was our main goal—data collection or community aid? They are inseparable in our project. Ideally, melding community aid with data collection in indigenous communities is an art of mutual sharing in which the ideal is that neither party loses anything of value and both parties gain confidence and understanding about each other.

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