Assessing Community Health Practices and Needs in Tropical Ecuador
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Background
In December of 2006 and January of 2007, our student research team carried out a community health survey in Mondaña, Ecuador. The goal of our research was to utilize rapid assessment methodology and a participatory research orientation to conduct a community health survey in the village of Mondaña, focusing on the urgent health needs and problems in the community. A rapid assessment process (RAP) was particularly well suited for our goals due to the limited timeframe and our intensive team-based approach (Beebe 2001).

Located on the Napo river, the village of Mondaña is in a unique position in that the village is located in close proximity to both an eco-lodge (Yachana Lodge), as well as the Colegio Técnica Yachana, a technical high school. In addition, Mondaña is one of few villages in the region to have a government-run health clinic, though medical personnel and supplies are generally in short supply.

Students from the colegio were not only key informants but also participants in the research process. University of Colorado Denver (UCD) students worked jointly with colegio students to develop questions for the semi-structured interviews and the latter were an important source of information on local terminology and practices. In addition, our partnership with the colegio students was an entrance to the community and they were invaluable in identifying key informants within Mondaña itself.

Methods
•This research utilized a Rapid Assessment Process. Beebe identifies three main components of a RAP approach: a systems perspective, triangulation of data collection, and an iterative data collection and analysis (1995:42):

  •A Systems Perspective: Interviews with community members focused on what they saw as critical health needs and concerns in the community. In addition, UCD team members observed interactions between three components in the system: Yachana Lodge, the colegio and the village of Mondaña. Several key informants were interviewed regarding the history of these components as well.

  •Triangulation of Data Collection: Data for this research project was pulled from multiple sources. Basic information on the area was gathered prior to the trip, and was augmented by online research at the site. Daily observations were made in the field and semi-structured interviews were conducted not only with community members, but with key informants at Yachana Lodge, Colegio Técnica Yachana, and the health clinic in Mondaña.

  •Iterative Data Collection and Analysis: Team members met repeatedly throughout the process to review observations, methods and findings. Interview responses were coded initially in the field and then underwent an additional coding process on arrival in Colorado. Field notes were taken daily and were continually reviewed throughout the research process before undergoing a final coding upon completion of the trip.

•Semi-structured interviews were conducted in Spanish by team members proficient in the language. In a few cases, Colegio Técnica Yachana students served as translators for community members who spoke only Quichua.

•This project utilized a community-based participatory orientation in which community members are partners in the research and both researchers and participants contribute to the learning process (Israel et al. 2003). In addition, UCD students served as data collectors, interviewers, translators, and recorders. In addition, they helped to generate questions for the interview guide based on issues that were of concern to the community, a key starting point in participatory research (Wallerstein and Duran 2006). Due to the time constraints, the participation of those who were familiar with the area, people, and language was essential. This participation is also a vital piece of RAP (Beebe 2001).

Results
•A total of 31 residents; including 12 students, 5 key informants and 13 community members, were interviewed.

  •The respondents included 15 women and 16 men

  •Eleven of the participants were under the age of 20, one was over the age of 60

  •Of the remaining participants, eight were between 20-29 years of age, two were between 30-39, two were between 40-49, and the remaining were of unknown age.

•Those interviewed identified improved sanitation, additional bathrooms, garbage removal and clean drinking water as the most pressing concerns. There was a general awareness that water should be boiled before use, however, that did not always translate into practice. The need for more bathrooms was mentioned by nearly every interviewee.

•Improved nutrition and greater access to medical staff and supplies were seen as additional needs. While treatment at the government-run clinic was free for members of the community, there were often long delays in service when supplies were lacking and the clinic was without a doctor. Insufficient funds was the most cited answer as a reason for a lack in nutrition. Many of the students and several community members expressed a desire for basic health and first aid training.

•Several strengths were identified in this community, including a basic awareness of health and nutrition, and a willingness to work together towards a common goal. One example of this is the nursery school currently under construction. The residents of Mondaña supplied the materials and the labor for this project when the need was recognized. In addition, a common concern for the health of the children of the community was a repeated theme, even by those without children of their own.

Interview Question Guide
1. ¿Cuales son las preocupaciones de la salud?
2. ¿Qué hace usted cuando está enfermo?
3. ¿Sus hijos son vacunados?
4. ¿Qué hace usted para mantenerse saludable?
5. ¿Cuando visita la clinica?
6. ¿Qué cosas necesitan en la comunidad para mejorar la salud?
7. ¿La comida cambió cuando una mujer está embarazada?
8. ¿Tiene usted agua entubada o suficiente en su casa?
9. ¿Qué agua usa para lavar las frutas y vegetales y para cocinar?
10. ¿Ayer, cuál fue su dieta?
11. ¿Usted produce su alimentación o compra?
12. ¿Sus hijos que prefieren beber: gaseosas o jugos naturales?
13. ¿La dieta de hoy es igual que la de antes?
14. ¿Qué comió y bebió ayer en el desayuno? ¿al almuerzo? ¿la cena?
15. ¿Qué comió ayer entre las comidas?
16. ¿Usted tiene suficiente comida durante el año?

Recommendations
The responses to the semi-structured interviews and the outcome of field observations resulted in the following recommendations to address several of the key needs and concerns of the community:

•Implement a basic first aid course for the community and the colegio.
•Encourage the planting of community gardens to address hunger in the community. These gardens could also provide an opportunity for colegio students to form a partnership with the residents of Mondaña and share their knowledge of sustainable agricultural practices.
•Use the water filtration system currently being implemented by the colegio to address the urgent clean water needs of the community. This system is relatively inexpensive and easy to install. In particular, placing these systems in the schools of the village could partially address the general concern with children’s health.